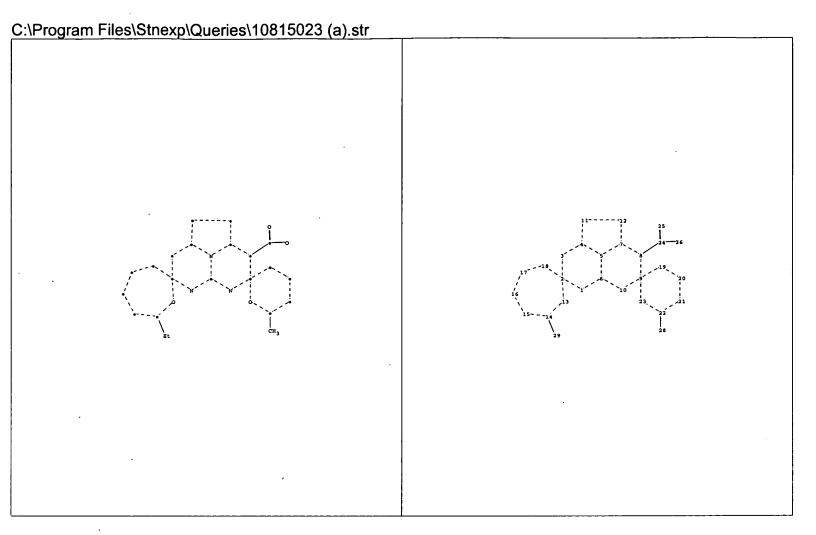
# **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	790	((544/231,245) or (514/257)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR .	OFF	2006/09/19 14:17

9/19/2006 2:17:43 PM Page 1

NPL			
8.	((TITLE-ABSTR-KEY(guanidine alkaloids)) OR (TITLE-ABSTR-KEY(guanidinium alkaloids)) OR (TITLE-ABSTR-KEY(ptilomycalin)) OR (TITLE-ABSTR-KEY (crambescidin))) AND (antifungal or fungal) [All Sources(- All Sciences -)]	15	
7.	((TITLE-ABSTR-KEY(guanidine alkaloids)) OR (TITLE-ABSTR-KEY(guanidinium alkaloids)) OR (TITLE-ABSTR-KEY(ptilomycalin)) OR (TITLE-ABSTR-KEY (crambescidin))) AND (antitumor or tumor or cancer) [All Sources(- All Sciences -)]	18	
6.	((TITLE-ABSTR-KEY(guanidine alkaloids)) OR (TITLE-ABSTR-KEY(guanidinium alkaloids)) OR (TITLE-ABSTR-KEY(ptilomycalin)) OR (TITLE-ABSTR-KEY (crambescidin))) AND antiviral [All Sources(- All Sciences -)]	11	
5.	(TITLE-ABSTR-KEY(guanidine alkaloids)) OR (TITLE-ABSTR-KEY(guanidinium alkaloids)) OR (TITLE-ABSTR-KEY(ptilomycalin)) OR (TITLE-ABSTR-KEY (crambescidin)) [All Sources(- All Sciences -)]	63	
4.	TITLE-ABSTR-KEY(guanidine alkaloids) [All Sources(- All Sciences -)]	38	
3.	TITLE-ABSTR-KEY(guanidinium alkaloids) [All Sources(- All Sciences -)]	2	
2.	TITLE-ABSTR-KEY(ptilomycalin) [All Sources(- All Sciences -)]	22	
1.	TITLE-ABSTR-KEY(crambescidin) [All Sources(- All Sciences -)]	21	

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chain nodes:

24 25 26 28 29

ring nodes:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

chain bonds:

8-24 14-29 22-28 24-25 24-26

ring bonds:

1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10 9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23

exact/norm bonds:

1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10 9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23 24-25 24-26

exact bonds:

8-24 14-29 22-28

isolated ring systems:

containing 1:

## Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLAS\$25:CLAS\$26:CLAS\$28:CLAS\$29:CLAS\$

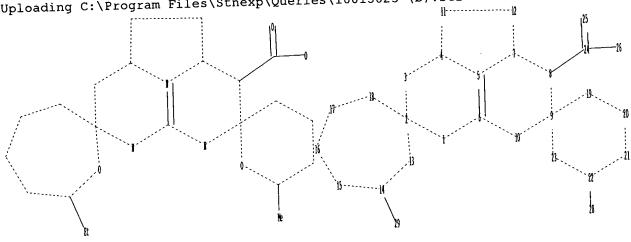
=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 964 AND 1006 AND 2040

#### SCREEN CREATED L1

Uploading C:\Program Files\Stnexp\Queries\10815023 (b).str



chain nodes : 24 25 26 28 29 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 chain bonds : 8-24 14-29 22-28 24-25 24-26 1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10 9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23 1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10 9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23 24-25 24-26 exact bonds : 8-24 14-29 22-28 isolated ring systems : containing 1:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 28:CLASS 29:CLASS

STRUCTURE UPLOADED

L2

=> que L2 AND L1

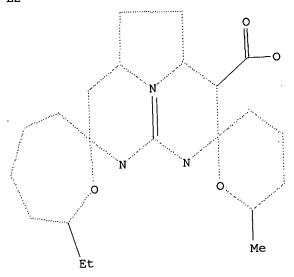
QUE L2 AND L1

=> d 13

L3 HAS NO ANSWERS

SCR 964 AND 1006 AND 2040 L1

STR L2



Structure attributes must be viewed using STN Express query preparation. QUE L2 AND L1 L3

 $\Rightarrow$  s 13 sss sam

SAMPLE SEARCH INITIATED 12:45:58 FILE 'REGISTRY' 1 TO ITERATE

SAMPLE SCREEN SEARCH COMPLETED -

0 ANSWERS 1 ITERATIONS 100.0% PROCESSED

SEARCH TIME: 00.00.01

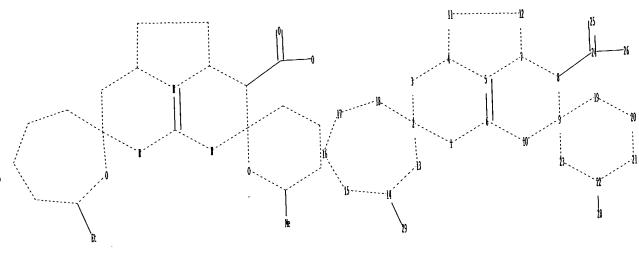
ONLINE \*\*COMPLETE\*\* FULL FILE PROJECTIONS: \*\*COMPLETE\*\*

BATCH 80

1 TO PROJECTED ITERATIONS: 0 O TO PROJECTED ANSWERS:

O SEA SSS SAM L2 AND L1 L4

Uploading C:\Program Files\Stnexp\Queries\10815023 (c).str

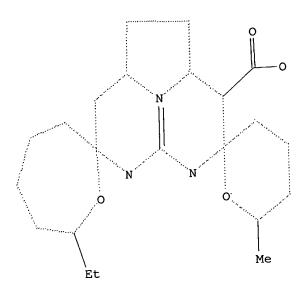


chain nodes : 24 25 26 28 29 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 chain bonds : 8-24 14-29 22-28 24-25 24-26 1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10 9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23 1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10 exact/norm bonds : 9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23 24-25 24-26 exact bonds : 8-24 14-29 22-28 isolated ring systems : containing 1:

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 1:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 11:Atom 12:Atom 21:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 28:CLASS 29:CLASS

L5 STRUCTURE UPLOADED

=> d 15 L5 HAS NO ANSWERS L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15 sss sam SAMPLE SEARCH INITIATED 12:47:17 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 44 TO 476
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

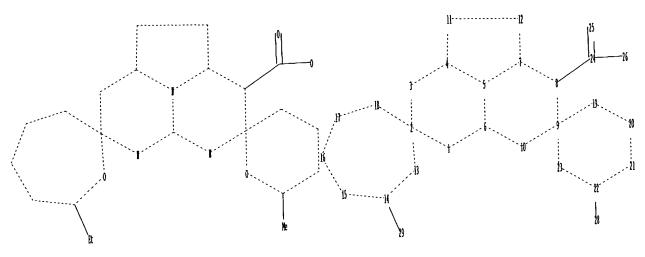
=> s 15 sss ful FULL SEARCH INITIATED 12:47:32 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 228 TO ITERATE

100.0% PROCESSED 228 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L7 0 SEA SSS FUL L5

=> Uploading C:\Program Files\Stnexp\Queries\10815023 (a).str

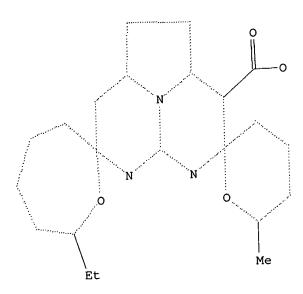


chain nodes :
24 25 26 28 29
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
chain bonds :
8-24 14-29 22-28 24-25 24-26
ring bonds :
1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10
9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23
exact/norm bonds :
1-2 1-6 2-3 2-13 2-18 3-4 4-5 4-11 5-6 5-7 6-10 7-8 7-12 8-9 9-10
9-19 9-23 11-12 13-14 14-15 15-16 16-17 17-18 19-20 20-21 21-22 22-23
24-25 24-26
exact bonds :
8-24 14-29 22-28
isolated ring systems :
containing 1 :

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 1:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 11:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 28:CLASS 29:CLASS

L8 STRUCTURE UPLOADED

=> d 18 L8 HAS NO ANSWERS L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 18 sss sam SAMPLE SEARCH INITIATED 12:48:25 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 9 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 44 TO 476
PROJECTED ANSWERS: 9 TO 360

L9 9 SEA SSS SAM L8

=> s 18 sss ful FULL SEARCH INITIATED 12:48:34 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 228 TO ITERATE

100.0% PROCESSED 228 ITERATIONS 176 ANSWERS

SEARCH TIME: 00.00.01

L10 176 SEA SSS FUL L8

=> => s 110 L11 63 L10

=> d 111 1-63 bib,ab,hitstr

L11 ANSWER 1 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:100738 CAPLUS

DN 144:198849

TI Novel dosage form comprising modified-release and immediate-release active ingredients

IN Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar

PA India

SO U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

IAV.CNI Z									
	PATENT NO.	KIND	DATE_	APPLICATION NO.	DATE				
			- <i>///</i> \\-						
PI	US 2006024365	A1	2,006020 <b>2</b>	US 2005-134633	20050519				
	IN 193042	Α	<i>j</i> 20040626 <b>\</b>	IN 2002-MU697	20020805				
	US 2004096499	A1	20040520	US 2003-630446	20030729				
PRAI	IN 2002-MU697	Α	20020805						
	IN 2002-MU699	Α	20020805						
	IN 2003-MU80	Α	\20030122						
	IN 2003-MU82	Α	\2003012 <i>2</i> /						
	US 2003-630446	A2	20030729						

AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

IT 135257-45-3, Crambescidin 816

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (novel dosage form comprising modified-release and immediate-release active ingredients)

RN 135257-45-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

L11 ANSWER 2 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:821020 CAPLUS

DN 143:363656

TI Alkaloids from the sponge Monanchora unguifera

AU Gallimore, Winklet A.; Kelly, Michelle; Scheuer, Paul J.

CS Department of Chemistry, University of Hawaii at Manoa, Honolulu, HI, 96822, USA

SO Journal of Natural Products (2005), 68(9), 1420-1423 CODEN: JNPRDF; ISSN: 0163 13864

PB American Chemical Society-American Society of Pharmacognosy

DT Journal

LA English

AB The bioassay-guided fractionation of the cytotoxic crude gum obtained from the Caribbean sponge Monanchora unguifera led to the isolation and characterization of the new compds. batzelladine J (I) and crambescidic acid (II) in addition to known guanidine alkaloids ptilomycalin A, ptilocaulin, and isoptilocaulin. The structures of the compds. were elucidated by interpretation of the 1D and 2D NMR expts. The chemotaxonomic implications of these findings are discussed.

IT 124512-47-6, Ptilomycalin A
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(alkaloids from sponge Monanchora unguifera)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

IT 866403-34-1P, Crambescidic acid

RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(alkaloids from sponge Monanchora unguifera)

RN 866403-34-1 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,

(2R,2''S,2'aR,6''S,7R,8'R,8'aS)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown. Currently available stereo shown.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L11 ANSWER 3 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
    2005:777878 CAPLUS
ΆN
DN
     143:339016
     Library versus library recognition and inhibition of the HIV-1 Nef
TI
     allelome
     Olszewski, Allison; Weiss, Gregory A.
AU
     Departments of Chemistry, Molecular Biology and
                                                     Biochemistry, University
CS
     of California, Irvine, CA, 92697-2025, VSA
SO
     Journal of the American Chemical Society (2005)
                                                      127(35), 12178-12179
     CODEN: JACSAT; ISSN: 0002-7863
    American Chemical Society
PB
     Journal
DΤ
     English
LΑ
     Rapid evolution of drug-resistant viruses renders essentially all
AB
     small-mol. antiviral treatments ineffective. The authors demonstrate an
     in vitro library vs. library approach to identify small mols. targeting a
     broad spectrum of HIV-1 Nef protein variants. The technique could provide
    more effective antiviral therapies. First, a library of clin. derived Nef
     allelic variants, termed an allelome, was selected for function by binding
     to Nef ligands p53, actin, or p56lck. Next, a library of small-mol.
     inhibitors challenged the Nef allelome in competition assays. In contrast
     to single-variant inhibition, structurally simpler mols. could better
     inhibit the Nef allelome. Addnl., Nef sequences selected for binding to
     p53 resembled sequences from patients with a rapid progression to AIDS
     phenotype. Thus, the allelome vs. small-mol. library approach offers a
     route for improving antiviral drug discovery and elucidating fundamental
     mechanisms of viral pathogenesis and resistance.
ΙT
     600706-88-5
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (library vs. library recognition and inhibition of HIV-1 Nef allelome)
RN
     600706-88-5 CAPLUS
```

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

,8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-amino-2-hydroxybutyl](3-

aminopropyl)amino]-10-oxodecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'

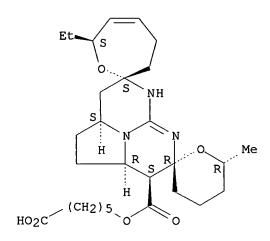
Absolute stereochemistry.

CN

●3 HCl

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L11 ANSWER 4 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
     2005:139449 CAPLUS
AN
DN
     142:392557
     Total Synthesis and Properties of the Crambescidin Core Zwitterionic Acid
ΤI
     and Crambescidin 359
     Aron, Zachary D.; Overman, Larry E.
AU
     Department of Chemistry, University of California, Irvine, CA, 92697-2025,
CS
     Journal of the American Chemical Society (2005),
SO
                                                      127(10), 3380-3390
     CODEN: JACSAT; ISSN: 0002-7863
PB
    American Chemical Society
DT
     Journal
     English
LΑ
OS
     CASREACT 142:392557
AΒ
     The total synthesis of the crambescidin core acid (I; R = CO2-),
     crambescidins 359 (I; R = H, X = Cl-) and 431 (I; R = CO2Et, X = CF2CO2-),
     and the properties of the crambescidin core are described. A key step of
     the synthetic route to guanidinium carboxylate I (R = CO2-) is Pd(0)
     catalyzed cleavage of the ester side chain of pentacyclic cinnamyl ester I
     [R = CO2CH2CH:CHPh-(E), X = HCO2-]. This ester is also employed to prepare
     a small library of crambescidin alkaloid analogs that differ in their C14
     side chain. The zwitterionic quanidinium carboxylate I (R = CO2-) was
     shown to readily decarboxylate to form crambescidin 359 (I; R = H, X =
     Cl-). Decarboxylation of crambescidin core acid I (R = CO2-) was fastest
     under basic conditions. In the presence of base, up to eight deuterium
     atoms can be incorporated into the pentacyclic crambescidin core. Both
     deuterium incorporation and decarboxylation of crambescidin core acid I (R
     = CO2-) are the result of facile ring opening of the spirocyclic ether
     rings of the pentacyclic quanidinium moiety.
IT
     849724-20-5DP, zwitterionic tautomer 849724-23-8DP,
     zwitterionic tautomer 849724-28-3DP, zwitterionic tautomer
     849724-30-7DP, zwitterionic tautomer 849724-33-0DP,
     zwitterionic tautomer 849724-36-3DP, zwitterionic tautomer
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and amidation of, by hydroxyspermidine derivative; total
synthesis
        and properties of the crambescidin core zwitterionic acid and
        crambescidin 359)
RN
     849724-20-5 CAPLUS
CN
     Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-6''-methyl-, 5-carboxypentyl ester,
     (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)
     CM
          1
        600706-81-8
        C28 H43 N3 O6
```



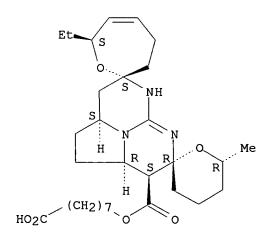
CRN 64-18-6 CMF C H2 O2

о=== сн- он

RN 849724-23-8 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 7-carboxyheptyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 600706-93-2 CMF C30 H47 N3 O6



CRN 64-18-6 CMF C H2 O2

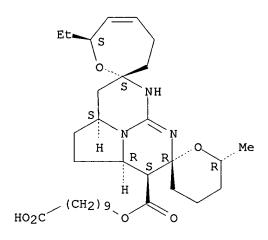
о=== сн- он

RN 849724-28-3 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2'' [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
 ,8'a-dodecahydro-6''-methyl-, 9-carboxynonyl ester,
 (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 600706-98-7 CMF C32 H51 N3 O6

Absolute stereochemistry.



CM 2

CRN 64-18-6 CMF C H2 O2

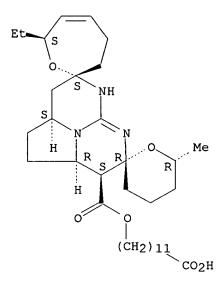
o = ch - oh

RN 849724-30-7 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 11-carboxyundecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 600706-99-8 CMF C34 H55 N3 O6

#### Absolute stereochemistry.



CM 2

CRN 64-18-6 CMF C H2 O2

### O = CH - OH

RN 849724-33-0 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 14-carboxytetradecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 600707-00-4 CMF C37 H61 N3 O6

CRN 64-18-6 CMF C H2 O2

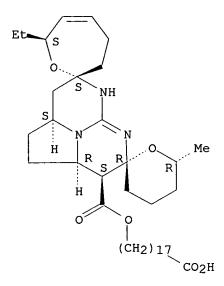
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RN 849724-36-3 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 17-carboxyheptadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 600707-01-5

CMF C40 H67 N3 O6



CRN 64-18-6 CMF C H2 O2

#### О=== СН− ОН

IT

zwitterionic tautomer 849724-29-4DP, zwitterionic tautomer 849724-32-9DP, zwitterionic tautomer 849724-35-2DP, zwitterionic tautomer 849724-37-4DP, zwitterionic tautomer RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and deprotection of; total synthesis and properties of the crambescidin core zwitterionic acid and crambescidin 359) RN 849724-25-0 CAPLUS CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, 6-[[(2S)-4-[[(1,1dimethylethoxy) carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-6-oxohexyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt) (9CI) (CA INDEX NAME)

849724-25-0DP, zwitterionic tautomer 849724-27-2DP,

CM 1

CRN 791583-90-9 CMF C45 H76 N6 O10

CRN 64-18-6 CMF C H2 O2

о=== сн- он

RN 849724-27-2 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 8-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-8-oxooctyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 785774-22-3 CMF C47 H80 N6 O10

CRN 64-18-6 CMF C H2 O2

о == СН − ОН

RN 849724-29-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-10-oxodecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt) (9CI) (CA INDEX
NAME)

CM 1

CRN 746603-55-4 CMF C49 H84 N6 O10

CRN 64-18-6 CMF C H2 O2

о=== сн-- он

RN 849724-32-9 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 12-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-12-oxododecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 765268-38-0 CMF C51 H88 N6 O10

CRN 64-18-6 CMF C H2 O2

о== сн− он

RN 849724-35-2 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-15-oxopentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt) (9CI) (CA INDEX
NAME)

CM 1

CRN 754975-46-7 CMF C54 H94 N6 O10

CRN 64-18-6 CMF C H2 O2

о== сн- он

RN 849724-37-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 18-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-18-oxooctadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt) (9CI) (CA INDEX
NAME)

CM 1

CRN 783302-30-7 CMF C57 H100 N6 O10

CRN 64-18-6 CMF C H2 O2

о=== сн- он

IT 849724-17-0DP, zwitterionic tautomer

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and epimerization of; total synthesis and properties of the crambescidin core zwitterionic acid and crambescidin 359)

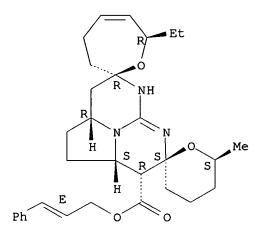
RN 849724-17-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester,
(2R,2''S,2'aR,6''S,7R,8'R,8'aS)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 849724-16-9 CMF C31 H41 N3 O4

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.



CRN 64-18-6 CMF C H2 O2

О== СН-ОН

600707-02-6DP, zwitterionic tautomer RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and palladium-catalyzed de-esterification of; total synthesis and properties of the crambescidin core zwitterionic acid and crambescidin 359) RN 600707-02-6 CAPLUS CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME) CM 600706-77-2 CRN CMF C31 H41 N3 O4

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

CRN 64-18-6 CMF C H2 O2

0== СН-ОН

RN 147664-30-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA
INDEX NAME)

124512-47-6P, Ptilomycalin A 135257-45-3P, Crambescidin IT 816 135257-46-4P, Crambescidin 800 135257-47-5P, Crambescidin 830 135283-73-7P, Crambescidin 844 163597-72-6P, Celeromycalin 214215-58-4P, Crambescidin 657 229160-50-3P, Neofolitispate 1 229160-51-4P, Neofolitispate 2 229160-52-5P, Neofolitispate 3 RL: PNU (Preparation, unclassified); PREP (Preparation) (total synthesis and properties of the crambescidin core zwitterionic acid and crambescidin 359) 124512-47-6 CAPLUS RN

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-CN [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

$$H_{2N}$$
 $(CH_{2})_{3}$ 
 $H_{2N}$ 
 $(CH_{2})_{4}$ 
 $(CH_{2})_{15}$ 
 $(CH_{2})_{15}$ 
 $(CH_{2})_{15}$ 

135257-45-3 CAPLUS RN

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-CN [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aS) - (9CI) (CA INDEX NAME)

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 135257-47-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 17-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-17-oxoheptadecyl ester (9CI) (CA INDEX NAME)

RN 135283-73-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 18-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-18-oxooctadecyl ester (9CI) (CA INDEX NAME)

RN 163597-72-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (14R)-16-[(4-aminobutyl)(3aminopropyl)amino]-14-hydroxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 214215-58-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 229160-50-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 17-methoxy-17-oxoheptadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 229160-51-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-methoxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 229160-52-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-methoxy-15-oxopentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 600706-78-3DP, zwitterionic tautomer

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(total synthesis and properties of the crambescidin core zwitterionic acid and crambescidin 359)

RN 600706-78-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 600706-77-2 CMF C31 H41 N3 O4

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

CRN 76-05-1 CMF C2 H F3 O2

IΤ 162145-90-6DP, zwitterionic tautomer 259734-00-4P, Crambescidin 431 316831-29-5DP, zwitterionic tautomer 600706-83-0DP, zwitterionic tautomer 600706-87-4DP, zwitterionic tautomer 600706-88-5DP, zwitterionic tautomer 600706-89-6DP, zwitterionic tautomer 600706-90-9DP, zwitterionic tautomer 600706-91-0DP, zwitterionic tautomer 732299-90-0DP, zwitterionic tautomer 732299-92-2DP, zwitterionic tautomer 849724-19-2DP, zwitterionic tautomer 849724-22-7DP, zwitterionic tautomer 849724-24-9DP, zwitterionic tautomer 849927-04-4DP, Crambescidin 431 trifluoroacetate, zwitterionic tautomer 849927-06-6DP, Crambescidin acid core trifluoroacetate, zwitterionic tautomer RL: SPN (Synthetic preparation); PREP (Preparation) (total synthesis and properties of the crambescidin core zwitterionic acid and crambescidin 359) RN 162145-90-6 CAPLUS

RN 162145-90-6 CAPLUS
CN Dispiro[oxepin-2(3H

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''R,2'aS,6''R,7s,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 162145-89-3 CMF C41 H67 N3 O6 Absolute stereochemistry. Rotation (-).

CM 2

CRN 64-18-6 CMF C H2 O2

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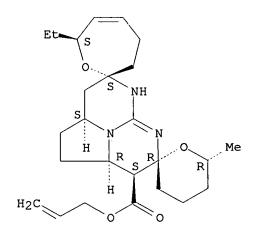
RN 259734-00-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, ethyl ester, (2R,2''S,2'aR,6''S,7R,8'R,8'aS)rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown. Currently available stereo shown.

RN 316831-29-5 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 2-propenyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



HCl

RN 600706-83-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 6-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-6-oxohexyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

# ●3 HCl

RN 600706-87-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 8-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-8-oxooctyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 600706-88-5 CAPLUS CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''- [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-amino-2-hydroxybutyl](3-aminopropyl)amino]-10-oxodecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ●3 HCl

RN 600706-89-6 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 12-[[(2S)-4-amino-2-hydroxybutyl](3-aminopropyl)amino]-12-oxododecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 600706-90-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-15-oxopentadecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 600706-91-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 18-[[(2S)-4-amino-2-hydroxybutyl](3-

aminopropyl)amino]-18-oxooctadecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 732299-90-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, phenylmethyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 732299-92-2 CAPLUS CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''- [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 3-methylbutyl ester, monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

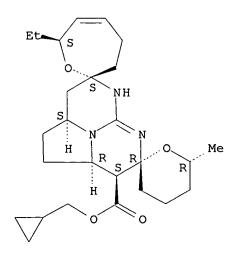
Absolute stereochemistry.

HCl

RN 849724-19-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, cyclopropylmethyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

RN 849724-22-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 6-oxo-6-(2-propenyloxy)hexyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 849724-21-6 CMF C31 H47 N3 O6

Absolute stereochemistry.

CM 2

CRN 64-18-6 CMF C H2 O2

о─ сн-он

RN 849724-24-9 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2'' [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
 ,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester,
 (2R,2''S,2'aR,6''S,7R,8'R,8'aS)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 849724-16-9 CMF C31 H41 N3 O4

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 849927-04-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 6-ethoxy-6-oxohexyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 849927-03-3 CMF C30 H47 N3 O6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 849927-06-6 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2'' [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
 ,8'a-dodecahydro-6''-methyl-, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-,
 mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 147664-30-0 CMF C22 H33 N3 O4

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 5 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2004:848616 CAPLUS
- DN 142:16274
- TI Guanidine alkaloid analogs as inhibitors of HIV-1 Nef interactions with p53, actin, and p56lck
- AU Olszewski, Allison; Sato, Ken; Aron, Zachary D.; Cohen, Frederick; Harris, Aleishia; McDougall, Brenda R.; Robinson, W. Edward, Jr.; Overman, Larry E.; Weiss, Gregory A.
- CS Department of Chemistry, University of California, Irvine, CA, 92697-2025, USA
- SO Proceedings of the National Academy of Sciences of the United States of America (2004), 101(39), 14079-14084

  CODEN: PNASA6; ISSN: 0027-8424
- PB National Academy of Sciences
- DT Journal
- LA English
- AB With current anti-HIV treatments targeting only 4 of the 15 HIV proteins, many potential viral vulnerabilities remain unexploited. We report small-mol. inhibitors of the HIV-1 protein Nef. In addition to expanding the anti-HIV arsenal, small-mol. inhibitors against untargeted HIV proteins could be used to dissect key events in the HIV lifecycle. Numerous incompletely characterized interactions between Nef and cellular ligands, for example, present a challenge to understanding mol. events during HIV progression to AIDS. Assays with phage-displayed Nef from HIVNL4-3 were used to identify a series of guanidine alkaloid-based inhibitors of Nef interactions with p53, actin, and p56lck. The quanidines, synthetic analogs of batzellidine and crambescidin natural products, inhibit the Nef-ligand interactions with IC50 values in the low micromolar range. In addition, sensitive in vivo assays for Nef inhibition are reported. Although compds. that are effective in vitro proved to be too cytotoxic for cellular assays, the reported Nef inhibitors provide proof-of-concept for disrupting a new HIV target and offer useful leads for drug development.
- IT 246851-97-8 275808-01-0 600706-83-0 600706-88-5 732299-90-0 799812-00-3
  - RL: PAC (Pharmacological activity); BIOL (Biological study) (guanidine alkaloid analogs as inhibitors of HIV-1 Nef interactions with p53, actin, and p56lck)
- RN 246851-97-8 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
  (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 275808-01-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●3 HCl

RN 600706-83-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 6-[[(2S)-4-amino-2-hydroxybutyl](3-

aminopropyl)amino]-6-oxohexyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

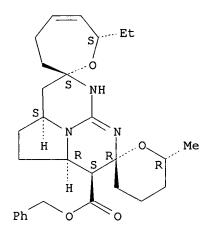
RN 600706-88-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-10-oxodecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

●3 HCl

RN 732299-90-0 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, phenylmethyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



HC1

RN 799812-00-3 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2'' [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
 ,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester,
 monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

HCl

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L11 ANSWER 6 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
     2004:824387 CAPLUS
ΑN
DN
     142:126838
     Erythroid differentiation in K562 chronic myelogenous cells induced by
ΤI
     crambescidin 800, a pentacyclic guanidine alkaloid
     Aoki, Shunji; Kong, Dexin; Matsui, Kouhei; Kobayashi, Motomasa
     Graduate School of Pharmaceutical Sciences, Osaka University, Suita,
CS
     565-0871, Japan
     Anticancer Research (2004), 24(4), 2325-2330
SO
     CODEN: ANTRD4; IS$N: 0250-7005
PB
     International Institute of Anticancer Research
DΤ
     Journal
LA
     English
AΒ
     The differentiation induction of K562 chronic myelogenous leukemia (CML)
     cells by crambescidin 800, a pentacyclic quanidine alkaloid isolated from
     a marine sponge, was examined Crambescidin 800 increased Hb production in K562
     cells at concns. of 0.15-1 \mu M and arrested the cell cycle of K562 cells
     at the S-phase. The expression of p21 was detected after 24-h treatment
     with crambescidin 800, and an increase of the expression was observed after
     48-h treatment, but there was no remarkable change in the expression level
     of p27. This evidence indicates that crambescidin 800 induced the
     differentiation of K562 cells into erythroblasts accompanied by cell cycle
     arrest at the S-phase. Furthermore, crambescidin 800 induced a morphol.
     change with neurite outgrowth in Neuro 2A cells at a 0.03-0.1 \mu m concentration
     135257-46-4, Crambescidin 800
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (erythroid differentiation in K562 chronic myelogenous leukemia cells
```

induced by pentacyclic guanidine alkaloid) RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10/815,023

L11 ANSWER 7 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:465489 CAPLUS

DN 141:174351

TI Synthesis and anticancer activity of side chain analogs of the crambescidin alkaloids

AU Aron, Zachary D.; Pietraszkiewicz, Halina; Overman, Larry E.; Valeriote, Fredrick; Cuevas, Carman

CS Department of Chemistry, University of California, Irvine, CA, 92697-2025, USA

SO Bioorganic & Medicinal Chemistry Letters (2004), 1/4(13), 3445-3449 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science B.V.

DT Journal

LA English

OS CASREACT 141:174351

AB Twenty three side chain analogs of the crambescidin alkaloids were prepared from the corresponding pentacyclic zwitterionic core acid. In the crambescidin 800 and 657 series, potency increased with increasing chain length. In addition, substantial variations in tumor selectivity with structure were seen. Crambescidin analogs having short, nonpolar side chains were identified for the first time as promising anticancer agents.

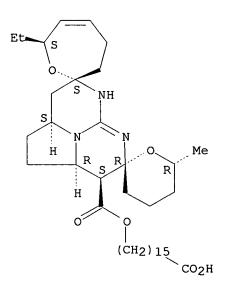
IT 214215-58-4, Crambescidin 657 214215-60-8, 13,14,15-Isocrambescidin 657 246851-97-8 275808-03-2 317831-97-3 600714-11-2 732299-89-7 732299-93-3 732299-96-6

RL: PAC (Pharmacological activity); BIOL (Biological study) (anticancer activity of)

RN 214215-58-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 214215-60-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'

,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 246851-97-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 275808-03-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

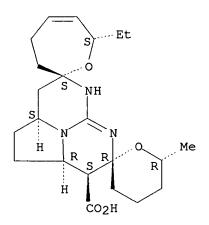
[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 317831-97-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



HCl

RN 600714-11-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, ethyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● HCl

RN 732299-89-7 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'R,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 732299-93-3 CAPLUS CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''- [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester, monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)- (9CI) (CA INDEX NAME)

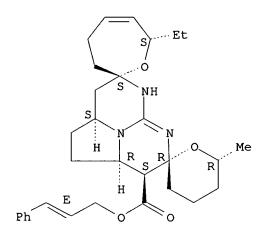
Absolute stereochemistry.
Double bond geometry as shown.

● HCl

RN 732299-96-6 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,75,8'S,8'aS)- (9CI) (CA INDEX NAME)

IT 600707-02-6 RL: PAC (Pharmacological activity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent) (synthesis and anticancer activity of side chain analogs of crambescidin alkaloids) RN 600707-02-6 CAPLUS Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-CN [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME) CM 1 CRN 600706-77-2 CMF C31 H41 N3 O4

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



CM 2
CRN 64-18-6
CMF C H2 O2

O=== CH- OH

Absolute stereochemistry.

RN 600706-93-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 7-carboxyheptyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 600706-98-7 CAPLUS

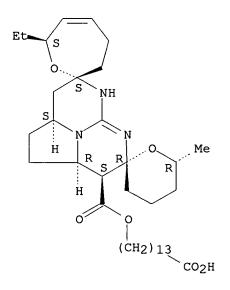
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 9-carboxynonyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 600706-99-8 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 11-carboxyundecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 600707-01-5 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 17-carboxyheptadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 732299-94-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 13-carboxytridecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)



CN Dispiro(oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 2-propenyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 600706-83-0 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 6-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-6-oxohexyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

## ●3 HCl

RN 600706-87-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 8-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-8-oxooctyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 600706-88-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-amino-2-hydroxybutyl](3-aminopropyl)amino]-10-oxodecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 600706-89-6 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 12-[[(2S)-4-amino-2-hydroxybutyl](3-aminopropyl)amino]-12-oxododecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 600706-91-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 18-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-18-oxooctadecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

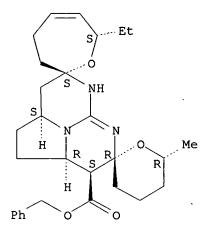
Absolute stereochemistry.

RN 732299-90-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, phenylmethyl ester, monohydrochloride,

(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

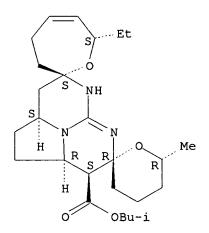


HCl

RN 732299-91-1 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 2-methylpropyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7s,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

RN 732299-92-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 3-methylbutyl ester, monohydrochloride,

(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 732299-95-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 14-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-14-oxotetradecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absoluté stereochemistry.

IT 600706-82-9P 600707-03-7P 600707-05-9P 600707-06-0P 600707-08-2P 732299-97-7P

Absolute stereochemistry.

PAGE 2-A

HC1

RN 600707-03-7 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 8-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-8-oxooctyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

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HCl

RN 600707-05-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-10-oxodecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

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● HCl

RN 600707-06-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 12-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-12-oxododecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

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### ● HCl

RN 600707-08-2 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 18-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-18-oxooctadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

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HCl

RN 732299-97-7 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 14-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-14-oxotetradecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

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● HCl

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 8 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- 2004:465166 CAPLUS AN
- DN 141:120455
- Monanchorin, a bicyclic alkaloid from the sponge Monanchora ungiculata ΤI
- ΑU
- Meragelman, Karina M.; McKee, Tawnya C.; McMahon, James B. Molecular Targets Development Program, Center for Cancer Research, National Cancer Institute at Frederick, Frederick, MD, 21702-1201, USA CS
- Journal of Natural Products (2004), 67(7), 1165-1167 SO CODEN: JNPRDF; ISSN: 0163-3864
- РΒ American Chemical Society
- Journal DΤ
- LΑ English
- Monanchorin (I), a quanidine alkaloid with an unusual bicyclic skeleton, AB together with the known pentacyclic alkaloid crambescidin acid have been isolated from the aqueous extract of the sponge Monanchora ungiculata.
- 147664-30-0, Crambescidin acid IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (bicyclic alkaloid from sponge Monanchora ungiculata)
- RN 147664-30-0 CAPLUS
- Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-CN [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

# 10/815,023

- L11 ANSWER 9 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2004:74641 CAPLUS
- DN 140:339505
- TI The tethered Biginelli condensation in natural product synthesis
- AU Aron, Zachary D.; Overman, Larry E.
- CS Department of Chemistry, University of California, Lévine, CA, 92697-2025, USA
- SO Chemical Communications (Cambridge, United Kingdom) (2004), (3), 253-265 CODEN: CHCOFS; ISSN: 1359-7345
- PB Royal Society of Chemistry
- DT Journal; General Review
- LA English
- AB This review describes the development of the tethered Biginelli condensation and its application to the total synthesis of structurally complex, bioactive guanidine alkaloids.
- IT 124512-47-6P, Ptilomycalin A 135257-46-4P, Crambescidin 800 151121-78-7P
  - RL: SPN (Synthetic preparation); PREP (Preparation)

(tethered Biginelli condensation in synthesis of guanidine alkaloids)

- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 135257-46-4 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

RN 151121-78-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)(9CI) (CA INDEX NAME)

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:975892 CAPLUS

DN 140:199483

TI Synthesis of marine guanidine alkaloids and their application as chemical/biological tools

AU Nagasawa, Kazuo; Hashimoto, Yuichi

CS Institute of Molecular and Cellular Biosciences, The University of Tokyo, Tokyo, 113-0032. Japan

Tokyo, 113-0032, Japan

Chemical Record (2003), 3(4), 201-211

CODEN: CRHEAK; ISSN: 1527-8999

PB John Wiley & Sons, Inc.

DT Journal; General Review

LA English

AB A review with refs. Ptilomycalin A and crambescidins, novel marine guanidine alkaloids, have a unique pentacyclic guanidine structure, and exhibit a considerable array of biol. activities. The first method developed for the synthesis of the pentacyclic guanidine core structure involved successive 1,3-dipolar cycloaddn. reactions and resulted in the first total synthesis of crambescidin 359. The synthesis of other pentacyclic guanidine derivs. has been based on this methodol. and applied as tools for studying biol. activities, and as chemical reaction catalysts.

IT 124512-47-6P, Ptilomycalin A 135257-45-3P, Crambescidin
816 135257-46-4P, Crambescidin 800 135257-47-5P,
Crambescidin 830 135283-73-7P, Crambescidin 844
151121-78-7P, Isocrambescidin 800 163597-72-6P,
Celeromycalin 163597-73-7P, Fromiamycalin
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis of marine guanidine alkaloids and their application as chemical/biol. tools)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

RN 135257-45-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 135257-47-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''- [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'

,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 17-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-17-oxoheptadecyl ester (9CI) (CA INDEX NAME)

RN 135283-73-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 18-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-18-oxooctadecyl ester (9CI) (CA INDEX NAME)

RN 151121-78-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)(9CI) (CA INDEX NAME)

RN 163597-72-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (14R)-16-[(4-aminobutyl)(3aminopropyl)amino]-14-hydroxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

$$H_2N-(CH_2)_4-N-C-CH_2-CH-(CH_2)_{13}-O-C$$
 $H_2N-(CH_2)_3$  OH O

RN 163597-73-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''- [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-,  $15-[1-(4-amino-2-hydroxybutyl)-1,4,5,6-tetrahydro-2-pyrimidinyl]pentadecyl ester, [2'as-[2'a\alpha,4'\alpha(R*),7'\alpha(S*),8'\beta(R*),8'a\alpha]]- (9CI) (CA INDEX NAME)$ 

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 11 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2003:949253 CAPLUS
- DN 140:300638
- TI A new bicyclic guanidine alkaloid, Sch 575948, from a marine sponge, Ptilocaulis spiculifer
- AU Yang, Shu-wei; Chan, Tze-ming; Pomponi, Shirley A.; Chen, Guodong; Wright, Amy E.; Patel, Mahesh; Gullo, Vincent; Pramanik, Birendra; Chu, Min
- CS Schering-Plough Research Institute, Kenilworth, NJ, 07033, USA
- SO Journal of Antibiotics (2003), 56(11), 970-972 CODEN: JANTAJ; ISSN: 0021-8820
- PB Japan Antibiotics Research Association
- DT Journal
- LA English
- AB A new antibacterial compound Sch 575948 (I) was isolated along with a known alkaloid ptilomycalin A from a marine sponge Ptilocaulis spiculifer as a part of a continuing search for novel anti-microbial agents. Sch 575948 was identified as a bicyclic bis-guanidine type of alkaloid, a homolog of crambescin A, identified as a major component of the homolog complex. The identified structure of Sch 575948 is a new member of crambescin A class of compds. with a shorter alkyl side chain. Sch 575948 exhibited antibacterial activity against a super sensitive strain of Staphylococcus aureus.
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
  NAME)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

2003:832854 CAPLUS ΑN

DN 140:2958

Crambescidin 826 and dehydrocrambine A: New polycyclic quanidine alkaloids ΤI from the marine sponge Monanchora sp. that inhibit HIV-1 fusion

Chang, LengChee; Whittaker, Noel F.; Bewley, Carole A. ΑU

Laboratory of Bioorganic Chemistry, National Institute of Diabetes and CS Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD, 20892-0820, USA

Journal of Natural Products (2003), 66(11), 1490-1494 SO CODEN: JNPRDF; ISSN: 0163-3864

PB American Chemical Society

DT Journal

LΑ English

Two new polycyclic quanidine alkaloids, crambescidin 826 (I) and AB dehydrocrambine A (II), and the known compds. crambescidin 800 (III) and fromiamycalin (IV) were isolated from the marine sponge Monanchora sp. The structures of I and II were elucidated by 2D NMR and mass spectrometry, and relative stereochem. was established by anal. of coupling consts. and ROESY spectra. The pentacyclic guanidine alkaloids I, III, and IV inhibit HIV-1 envelope-mediated fusion in vitro with IC50's of 1-3 µM, while compound II, a tricyclic guanidine alkaloid, showed weaker inhibition, with an IC50 of .apprx.35 μM.

IT 628727-32-2P, Crambescidine 826 RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

> (polycyclic guanidine alkaloids from marine sponge Monanchora sp. that inhibit HIV-1 fusion)

RN628727-32-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, 18-[(4-amino-4-oxobutyl)(3aminopropyl)amino]-18-oxooctadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

ΙT 135257-46-4, Crambescidin 800 163597-73-7, Fromiamycalin RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)

(polycyclic guanidine alkaloids from marine sponge Monanchora sp. that inhibit HIV-1 fusion)

RN 135257-46-4 CAPLUS

CN

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 163597-73-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 15-[1-(4-amino-2-hydroxybutyl)-1,4,5,6-tetrahydro-2-pyrimidinyl]pentadecyl ester, [2'aS-[2'a $\alpha$ ,4' $\alpha$ (R\*),7' $\alpha$ (S\*),8' $\beta$ (R\*),8'a $\alpha$ ]]- (9CI) (CA INDEX NAME)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 13 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
AN
     2003:737413 CAPLUS
DN
     139:261451
     Preparation of crambescidin core acid intermediates and their use for
ΤI
     preparing crambescidin alkaloid analogs as antiviral, antifungal and/or
     antitumor agents
     Overman, Larry E.; Stappenbeck, Frank; McDonald, Andrew I.; Aron, Zachary
IN
     The Regents of the University of California, USA
PA
     U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S. Ser. No. 18,630.
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AΒ
     The invention provides methods to synthesize zwitterionic pentacyclic
     crambescidin core intermediates having the carboxylate side chain in the
     natural axial orientation, such as I [R1 = saturated, unsatd., cyclic,
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The invention provides methods to synthesize zwitterionic pentacyclic crambescidin core intermediates having the carboxylate side chain in the natural axial orientation, such as I [Rl = saturated, unsatd., cyclic, acyclic, straight, branched chiral and achiral hydrocarbyl group; R2 = H, alkyl, aryl, heteroaryl, carboxy, carboxylate anion, phosphonate, phosphate, sulfonate, sulfate, borate, boronate, amine], and a range of crambescidin alkaloid analogs for their therapeutic use as antiviral, antifungal and/or antitumor agents. Thus, crambescidin 657 analog II was prepared via a multistep synthetic sequence starting from cinnamyl alc., Me (7R)-7-(tert-butyldimethylsilyl)-3-oxo-octanoate, (6S,11Z,13S)-8-(1',3'-dioxan-2'-yl)-2-methyl-13-triisopropylsilyloxy-6-ureidopentadeca-2,11-

diene and allyl 6-iodohexanoate. The prepared compds. were evaluated for in vitro cytotoxicity against murine tumor (e.g., colon 38 tumor, or as a single cell from a murine leukemia (L1210) cell line).

IT 317831-93-9P 600706-81-8P 600706-93-2P 600706-98-7P 600706-99-8P 600707-00-4P 600707-01-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of crambescidin core acid intermediates and their use for preparing crambescidin alkaloid analogs as antiviral, antifungal and/or antitumor agents)

RN 317831-93-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

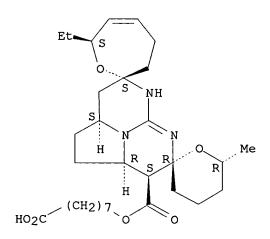
RN 600706-81-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 5-carboxypentyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 600706-93-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 7-carboxyheptyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 600706-98-7 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2'' [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
 ,8'a-dodecahydro-6''-methyl-, 9-carboxynonyl ester,
 (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 600706-99-8 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 11-carboxyundecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

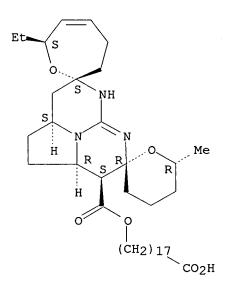
Absolute stereochemistry.

RN 600707-00-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 14-carboxytetradecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 600707-01-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 17-carboxyheptadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



TT 135257-46-4DP, Crambescidin 800, analog 214215-58-4DP, Crambescidin 657, analogs 600706-80-7P 600706-83-0P 600706-86-3P 600706-87-4P 600706-88-5P 600706-89-6P 600706-90-9P 600706-91-0P 600714-11-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of crambescidin core acid intermediates and their use for

preparing crambescidin alkaloid analogs as antiviral, antifungal and/or antitumor agents)

RN 135257-46-4 CAPLUS

CN Dispiro(oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecáhydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 214215-58-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

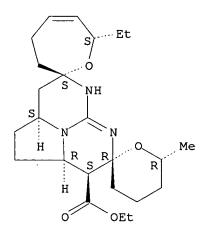
RN 600706-80-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, ethyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR), mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 600706-79-4 CMF C24 H37 N3 O4

Absolute stereochemistry. Rotation (-).



CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 600706-83-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 6-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-6-oxohexyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### ●3 HCl

RN 600706-86-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

G

CRN 162145-89-3 CMF C41 H67 N3 O6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 600706-87-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 8-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-8-oxooctyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

$$H_2N$$
OH
 $CH_2$ ) 3
 $H_2N$ 
OH
 $CH_2$ ) 7
O
 $CH_2$ ) 7

### ●3 HCl

RN 600706-88-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-10-oxodecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 600706-89-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 12-[[(2S)-4-amino-2-hydroxybutyl](3-aminopropyl)amino]-12-oxododecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 600706-90-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-15-oxopentadecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 600706-91-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 18-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-18-oxooctadecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 600714-11-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, ethyl ester, monohydrochloride,

(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

HCl

IT 600708-86-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of crambescidin core acid intermediates and their use for preparing crambescidin alkaloid analogs as antiviral, antifungal and/or antitumor agents)

RN 600708-86-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2S,2''R,2'aS,6''R,7S,8'S,8'aR), compd. with
methanol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 147664-30-0 CMF C22 H33 N3 O4

CM 2

CRN 67-56-1 CMF C H4 O

нзс-он

IT 600706-76-1P 600706-78-3P 600706-82-9P 600707-02-6P 600707-03-7P 600707-05-9P

600707-06-0P 600707-07-1P 600707-08-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of crambescidin core acid intermediates and their use for preparing crambescidin alkaloid analogs as antiviral, antifungal and/or antitumor agents)

RN 600706-76-1 CAPLUS

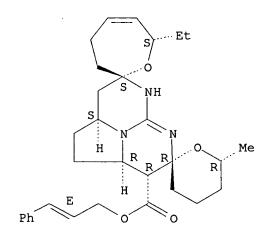
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester,
(2S,2''R,2'aS,6''R,7S,8'R,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 600706-75-0 CMF C31 H41 N3 O4

Absolute stereochemistry.

Double bond geometry as shown.



CM 2

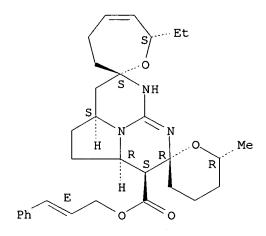
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RN 600706-78-3 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2'' [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
 ,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester,
 (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 600706-77-2 CMF C31 H41 N3 O4

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 600706-82-9 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 6-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1-

dimethylethoxy)carbonyl]amino]propyl]amino]-6-oxohexyl ester, monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'AR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

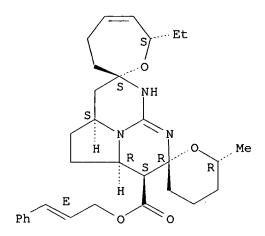
● HCl

RN 600707-02-6 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2E)-3-phenyl-2-propenyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 600706-77-2
CMF C31 H41 N3 O4

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.



CM 2

CRN 64-18-6 CMF C H2 O2

0=== СН- ОН

RN 600707-03-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 8-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-8-oxooctyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

PAGE 2-A

● HCl

RN 600707-05-9 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 10-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-10-oxodecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

PAGE 2-A

● HCl

RN 600707-06-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 12-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-12-oxododecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

PAGE 2-A

HCl

RN 600707-07-1 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-15-oxopentadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

PAGE 2-A

#### ● HCl

RN 600707-08-2 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 18-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-18-oxooctadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

PAGE 2-A

● HCl

- L11 ANSWER 14 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2003:561403 CAPLUS
- DN 139:350870
- TI Stereoselective synthesis of novel ptilomycalin a analogs via successive 1,3-dipolar cycloaddition reactions and their Ca2+-ATPase inhibitory activity
- AU Georgieva, Angelina; Hirai, Manabu; Hashimoto, Yuichi; Nakata, Tadashi; Ohizumi, Yasushi; Nagasawa, Kazuo
- CS Institute of Physical and Chemical Research (RIKEN), Saitama, 351-0198,
- SO Synthesis (2003), (9), 1427-1432 CODEN: SYNTBF; ISSN: 0039-7881
- PB Georg Thieme Verlag
- DT Journal
- LA English
- OS CASREACT 139:350870
- AB The pentacyclic guanidine compds. I and II (R = H, R1) were stereoselectively synthesized as novel ptilomycalin A and crambescidin analogs. The synthetic method involves successive 1,3-dipolar cycloaddn. reactions which effectively access the key intermediates, trans- and cis-2,5-disubstituted pyrrolidine having hydroxyl groups at the  $\beta$ -positions on their side chains. Among the analogs synthesized, I and II (R = R1) exhibited significant inhibitory activity against Ca2+-ATPase.
- IT 124512-47-6DP, Ptilomycalin a, analogs
   RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
   BIOL (Biological study); PREP (Preparation)
   (stereoselective synthesis of novel ptilomycalin a analogs via
   successive 1,3-dipolar cycloaddn. reactions and their Ca2+-ATPase
   inhibitory activity)
- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
  NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD

- L11 ANSWER 15 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2002:943486 CAPLUS
- DN 138:304432
- TI A synthesis of crambescidin 359
- AU Moore, Christopher G.; Murphy, Patrick J.; Williams, Harri L.; McGown, Alan T.; Smith, Nigel K
- CS Department of Chemistry, University of Wales, Bangor, Gwynedd, LL57 2UW, UK
- SO Tetrahedron Letters (2002), Volume Date 2003, 44(2), 251-254 CODEN: TELEAY; ISSN: 0040-4039
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- OS CASREACT 138:304432
- AB A potentially biomimetic synthesis of the guanidine-containing marine natural product crambescidin 359 [I.Cl- (prepared as tetrafluoroborate)] via a double Michael addition of guanidine to a suitably functionalized bis-enone is reported.
- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 16 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
L11
AN
     2002:521462 CAPLUS
DN
     137:88442
TΙ
     Incensole and furanogermacrens and compounds in treatment for inhibiting
     neoplastic lesions and microorganisms
IN
     Shanahan-Pendergast, Elisabeth
PA
     Ire.
SO
     PCT Int. Appl., 68 pp.
     CODEN: PIXXD2
DΤ
     Patent
     English
LΑ
FAN.CNT 1
                                 DATE
     PATENT NO.
                         KIND
                                             APPLICATION NO.
                                                                     DATE
     _____
                          ____
                                             _____
                                                                     -----
                                20020711 /
PΙ
     WO 2002053138
                          A2
                                             WO 2002-IE1
                                                                     20020102
     WO 2002053138
                                20020919
                          A3
         W: AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD,
             UA, UG, US, VN, YU, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG \downarrow
                                           AU 2002-219472
     AU 2002219472
                          Α1
                                 20020716
                                                                     20020102
     EP 1351678
                          A2
                                20031015
                                           FP 2002-727007
                                                                     20020102
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
92583 A1 20040513 US 2004
                                           US 2004-250535
     US 2004092583
                                                                     20040102
PRAI IE 2001-2
                          Α
                                 20010102
     WO 2002-IE1
                          W
                                 20020102
os
     MARPAT 137:88442
AΒ
     The invention discloses the use of incensole and/or furanogermacrens,
     derivs. metabolites and precursors thereof in the treatment of neoplasia,
     particularly resistant neoplasia and immunodysregulatory disorders. These
     compds. can be administered alone or in combination with conventional
     chemotherapeutic, antiviral, antiparasite agents, radiation and/or
     surgery. Incensole and furanogermacren and their mixture showed antitumor
     activity against various human carcinomas and melanomas and antimicrobial
     activity against Staphylococcus aureus and Enterococcus faecalis.
IT
     135257-45-3, Crambescidin 816
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (pharmaceutical formulation further including; incensole and
        furanogermacrens and compds. as antitumor and antimicrobial agents)
     135257-45-3 CAPLUS
RN
     Dispiro[oxepin-2(3H), 4'-[4H-5, 6, 8b] triazaacenaphthylene-7'(5'H), 2''-
CN
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2-
     hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
     (2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)
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ANSWER 17 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN L11; AN 2001:304407 CAPLUS 136:/151335 DN The tethered Biginelli condensation and the enantioselective synthesis of TI crambescidin 800, crambescidin 657 and neofolitispate 2 and progress towards the total synthesis of asparagamine A and stemofoline ΑU McDonald, Andrew Ian CS Univ. of California, Irvine, CA, USA (2000) 160 pp. Avail.: UMI, Order No. DA9974156 SO From: Diss. Abstr. Int., B 2000, 61(5), 2541 DTDissertation Common Jus LА English ΑB Unavailable IT 135257-46-4P, Crambescidin 800 214215-58-4P, Crambescidin 657 229160-51-4P, Neofolitispate 2 RL: SPN (Synthetic preparation); PREP (Preparation) (tethered Biginelli condensation and enantioselective synthesis of crambescidin 800, crambescidin 657 and neofolitispate 2 and progress towards total synthesis of asparagamine A and stemofoline) RN 135257-46-4 CAPLUS Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-CN [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'

,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3-

aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-

Absolute stereochemistry. Rotation (-).

(CA INDEX NAME)

(9CI)

RN 214215-58-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 229160-51-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-methoxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

L11 ANSWER 18 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:292810 CAPLUS

DN 135:92768

TI Synthesis and biological activity of analogues of ptilomycalin A

AU Black, G. P.; Coles, S. J.; Hizi, A.; Howard-Jones, A. G.; Hursthouse, M. B.; McGown, A. T.; Loya, S.; Moore, C. G.; Murphy, P. J.; Smith, N. K.; Walshe, N. D. A.

CS Department of Chemistry, University of Wales, Gwynedd, Bangor, LL57 2UW,

SO Tetrahedron Letters (2001), 42(19), 3377-3381 CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier Science Ltd.

DT Journal

LA English

OS CASREACT 135:92768

AB Benzo-fused model compds. I (X = CH2, n = 12; X = 0; n = 10), resembling in structure the marine metabolite ptilomycalin A, were prepared and were shown to display significant activity against a series of cancer cell lines and to also possess a significant activity against the DNA polymerase activity of the reverse transcriptase of human immunodeficiency virus type 1 (HIV-1 RT).

IT 124512-47-6, Ptilomycalin A
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (cytotoxic activity and HIV-1 reverse transcriptase inhibitory activity of)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 19 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
AN
     2001:12459 CAPLUS
     134:86416
DN
ΤI
     Preparation of hexahydropyrrolo[1,2-c]pyrimidines, quanidinium alkaloids,
     as antiviral, antifungal and/or antitumor agents
     Overman, Larry A.; Stappenbeck, Frank; Mcdonald, Andrew I.
IN
     The Regents of the University of California, USA
PA
so
     PCT Int. Appl., 222 pp.
     CODEN: PIXXD2
DT
     Patent
LА
     English
FAN.CNT 2
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
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                                            WO 2000-US18395
                                                                    20000630
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             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2376758
                                            CA 2000-2376758
                                                                    20000630
                          AΑ
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             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003503411
                          Т2
                                20030128
                                            JP 2001-507034
                                                                    20000630
     BR 2000011912
                                20030624
                                            BR 2000-11912
                                                                    20000630
                          Α
     NZ 516917
                                20030926
                                            NZ 2000-516917
                                                                   20000630
                          Α
     AU 777578
                                20041021
                                            AU 2000-60703
                                                                   20000630
                          В2
                                                                  20011214
                                20030314
                                            ZA 2001-10327
     ZA 2001010327
                          Α
                                            US 2002-255994 Pauding
     US 2003176697
                         A1
                                20030918
                                                                 0 20020924
     US 2005239804
                          A1
                                20051027
                                            US 2004-815023
                                                                   20040330
     AU 2004231239
                          A1
                                20041223
                                            AU 2004-231239
                                                                   20041119
                          Ρ
                                19990630
PRAI US 1999-142027P
     US 1999-142028P
                          Р
                                19990630
                                20000630
     WO 2000-US18395
                          W
                                20011214
     US 2001-18630
                          A2
OS
     MARPAT 134:86416
     Antiviral, antifungal and/or antitumor agents, hexahydropyrrolo[1,2-
AB
     c]pyrimidines, quanidinium alkaloids, I (R = H, carboxylic acid protecting
     group, an \omega-alkoxycarboxylic acid or ester; X = any pharmaceutically
     acceptable counterion) were prepared In vitro screening of 60 tumor cell
     lines against pharmaceutical compns. I to determine antitumor activity is
     described. Enantioselective synthesis of quanidinium alkaloid compds.
     with cis- or trans-1-oxo- and -1-iminohexahydropyrrolo[1,2-c]pyrimidine
     units including, 13,14,15-isocrambescidin 800, crambescidin 800 and
     ptilomycalin A was accomplished. Methods for preparing novel pentacyclic
     intermediates for the preparation of the crambescidin/ptilomycalin family of
     guanidinium alkaloids and congeners are also disclosed.
IT
     276878-01-4P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
```

(preparation of hexahydropyrrolo[1,2-c]pyrimidines as antiviral, antifungal

(Preparation); RACT (Reactant or reagent); USES (Uses)

and/or antitumor agents)

RN 276878-01-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2R)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 316831-10-4P 316831-11-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hexahydropyrrolo[1,2-c]pyrimidines as antiviral, antifungal and/or antitumor agents)

RN 316831-10-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[(2S)-2-[(2S)-3,3,3-trifluoro-2methoxy-1-oxo-2-phenylpropoxy]-4-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]butyl][3-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]propyl]amino]hexadecyl ester, monohydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

PAGE 2-A

● HCl

RN 316831-11-5 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[(2R)-2-[(2S)-3,3,3-trifluoro-2methoxy-1-oxo-2-phenylpropoxy]-4-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]butyl][3-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]propyl]amino]hexadecyl ester, monohydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

### PAGE 2-A

## HCl

CM

1

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IT
     162145-92-8P 162240-64-4P 246266-20-6P
     246266-22-8P 246516-57-4P 246851-97-8P,
     13,14,15-Isocrambescidin 800 trihydrochloride 275808-01-0P,
     (-)-Ptilomycalin A trihydrochloride 275808-03-2P, Crambescidin
     800 trihydrochloride 275808-29-2P 275808-55-4P
     275808-56-5P 275808-57-6P 275823-78-4P
     276877-93-1P 316830-89-4P 316831-29-5P
     316831-34-2P 317831-96-2P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
     (Reactant or reagent); USES (Uses)
        (preparation of hexahydropyrrolo[1,2-c]pyrimidines as antiviral, antifungal
        and/or antitumor agents)
     162145-92-8 CAPLUS
RN
     Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-
CN
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-6''-methyl-, 16-[[4-[[(1,1-dimethylethoxy)carbonyl]amino]
     butyl][3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-16-
     oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt)
     (9CI) (CA INDEX NAME)
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CRN 162145-91-7 CMF C55 H96 N6 O9

Absolute stereochemistry. Rotation (-).

CM 2

CRN 64-18-6 CMF C H2 O2

О== СН− ОН

RN 162240-64-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[4-[[(1,1-dimethylethoxy)carbonyl]amino]
butyl][3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)-, monoformate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 162240-63-3 CMF C55 H96 N6 O9

CM 2

CRN 64-18-6 CMF C H2 O2

о=== сн- он

RN 246266-20-6 CAPLUS

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 246266-22-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 2-A

HCl

RN 246516-57-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,

monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

RN 246851-97-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 275808-01-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16-

oxohexadecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

●3 HCl

RN 275808-03-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 275808-29-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'R,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 275808-28-1 CMF C41 H67 N3 O6

Absolute stereochemistry. Rotation (+).

CM 2

CRN 64-18-6 CMF C H2 O2

о== сн− он

RN 275808-55-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 275808-56-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

PAGE 2-A

● HCl

RN 275808-57-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-(acetylamino)-2(acetyloxy)butyl][3-(acetylamino)propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 2-A

HCl

RN 275823-78-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 276877-93-1 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 276877-92-0 CMF C41 H67 N3 O6

Absolute stereochemistry.

CM 2

CRN 64-18-6 CMF C H2 O2

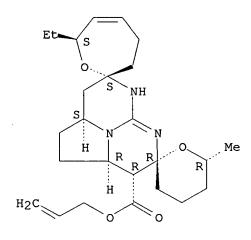
0== СН- ОН

RN 316830-89-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 2-propenyl ester,
(2S,2''R,2'aS,6''R,7S,8'R,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 316830-88-3 CMF C25 H37 N3 O4

Absolute stereochemistry.



CM 2

CRN 64-18-6 CMF C H2 O2

O=== CH- OH

RN 316831-29-5 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 2-propenyl ester, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

● HCl

RN 316831-34-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 317831-96-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''S,2'aS,6''R,7S,8'S,8'aS)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 317831-95-1 CMF C41 H67 N3 O6

Absolute stereochemistry. Rotation (-).

CM 2

CRN 64-18-6 CMF C H2 O2

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IT 275808-54-3 317831-94-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (preparation of hexahydropyrrolo[1,2-c]pyrimidines as antiviral, antifungal

(preparation of hexahydropyrrolo[1,2-c]pyrimidines as antiviral, antifungal and/or antitumor agents)

RN 275808-54-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)- (9CI) (CA INDEX NAME)

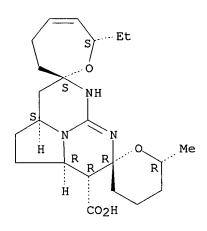
RN 317831-94-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)-,
monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 317831-93-9 CMF C22 H33 N3 O4

Absolute stereochemistry.



CM 2

CRN 64-18-6 CMF C H2 O2

## о== сн− он

IT 125422-23-3P 214215-60-8P 246266-23-9P 276878-95-6P 316831-04-6P 317831-97-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hexahydropyrrolo[1,2-c]pyrimidines as antiviral, antifungal and/or antitumor agents)

RN 125422-23-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[4-[(trifluoroacetyl)amino]butyl]
[3-[(trifluoroacetyl)amino]propyl]amino]hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 125422-22-2 CMF C49 H78 F6 N6 O7

Absolute stereochemistry. Rotation (-).

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 214215-60-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 246266-23-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-(acetylamino)-2(acetyloxy)butyl][3-(acetylamino)propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

NH

H

Et

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PAGE 2-A

HCl

RN 276878-95-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 316831-04-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[(2S)-2-[(2S)-3,3,3-trifluoro-2methoxy-1-oxo-2-phenylpropoxy]-4-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]butyl][3-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]propyl]amino]hexadecyl ester, trihydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

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# ●3 HCl

RN 317831-97-3 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, monohydrochloride,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

● HCl

IT 276878-06-9P 316831-35-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of hexahydropyrrolo[1,2-c]pyrimidines as antiviral, antifungal and/or antitumor agents)

RN 276878-06-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 316831-35-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''- [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'

,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L11 ANSWER 20 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
     2000:293396 CAPLUS
ΔN
DN
     133:58969
     Enantioselective Total Syntheses of 13,14,15-Isocrambescidin 800 and
TI
     13,14,15-Isocrambescidin 657
ΑU
     Coffey, D. Scott; Overman, Larry E.; Stappenbeck, Frank
     Department of Chemistry, University of California, Irvine, CA, 92697-2025,
CS
SO
     Journal of the American Chemical Society (2000), 122(20), 4904-4914
     CODEN: JACSAT; ISSN: 0002-7863
                                                   Common In
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     American Chemical Society
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     Journal
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     CASREACT 133:58969
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AB
     The first total syntheses of 13,14,15-isocrambescidin 800 [I·Cl-; R
     = NH(CH2CH2CH2NH2)CH2CH(OH)CH2CH2NH2-(S)] and 13,14,15-isocrambescidin 657
     (I; R = O-) were accomplished in convergent fashion. The central
     strategic step was a tethered Biginelli condensation of quanidine aminal
     II. HCl [TIPS = Si(CHMe2)3] and \beta-ketoester,
     (R)-H2C:CHCH2O2C(CH2)15O2CCH2C(:O)(CH2)3CHMeOSiMe2CMe3, to give
     1-iminohexahydropyrrolo[1,2-c]pyrimidine carboxylic ester III·HCl
     [R1 = (CH2)15CO2CH2CH:CH2, R2 = TBDMS, R3 = TIPS; TBDMS = SiMe2CMe3].
     This step united all the heavy atoms of the pentacyclic quanidine nucleus
     and set the critical trans C10-C13 stereorelationship. Acidic treatment of
     derivative III·HCl [R1 = (CH2)15CO2CH2CH:CH2; R2 = R3 = H] triggered
     tricyclization to generate pentacyclic guanidine IV·Cl- in high
     yield. After cleavage of the allyl ester, the derived acid underwent
     coordinated epimerization at C14 and C15 in the presence of triethylamine
     to form the pentacyclic isocrambescidin nucleus. The synthesis of I was
     achieved in 11% overall yield from amine V by a sequence involving five
     isolated intermediates. As detailed in the preceding account, V can be
     accessed from com. available 3-butyn-1-ol in 30% overall yield by way of
     nine isolated and purified intermediates. Mosher derivs. were prepared from
     (S) - (-) - \alpha-methoxy-\alpha-(trifluoromethyl)phenylacetic acid and
     natural I [R = NH(CH2CH2CH2NH2)CH2CH(OH)CH2CH2NH2-(S)], synthetic I [R = NH(CH2CH2CH2NH2)]
     NH(CH2CH2CH2NH2)CH2CH(OH)CH2CH2NH2-(S)], and synthetic C43 epimer
     I \cdot 2HC1 \cdot C1 - [R = NH(CH2CH2CH2NH2)CH2CH(OH)CH2CH2NH2 - (R)].
     Anal. by 19F NMR showed that the Mosher derivs. of natural and synthetic I
     [R = NH(CH2CH2CH2NH2)CH2CH(OH)CH2CH2NH2-(S)]were identical, thus
     establishing for the first time that the stereochem. of
     13,14,15-isocrambescidin 800 [I·Cl-; R =
     NH(CH2CH2CH2NH2)CH2CH(OH)CH2CH2NH2-(S)] at C43 is S. The mechanism of the
     tricyclization and epimerization steps is discussed, as are the relative
     energies of the 13,14,15-isocrambescidin, 13,15-epicrambescidin, and
     13-epicrambescidin quanidine moieties.
IT
     246266-20-6P 246516-57-4P 276878-06-9P
     RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (enantioselective total syntheses of isocrambescidin 800 and
        isocrambescidin 657)
RN
     246266-20-6 CAPLUS
     Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-
CN
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
     monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)
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RN 246516-57-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 276878-06-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

IT 276878-02-5P 276878-03-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (enantioselective total syntheses of isocrambescidin 800 and isocrambescidin 657)

RN 276878-02-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[(2S)-2-[(2S)-3,3,3-trifluoro-2methoxy-1-oxo-2-phenylpropoxy]-4-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]butyl][3-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]propyl]amino]hexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

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# ●3 HCl

RN 276878-03-6 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[(2R)-2-[(2S)-3,3,3-trifluoro-2methoxy-1-oxo-2-phenylpropoxy]-4-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]butyl][3-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]propyl]amino]hexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

## PAGE 2-A

## ●3 HCl

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246266-22-8P 246851-97-8P 276877-93-1P
IT
     276877-98-6P 276878-01-4P 276878-95-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (enantioselective total syntheses of isocrambescidin 800 and
        isocrambescidin 657)
RN
     246266-22-8 CAPLUS
     Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-
CN
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-[[(1,1-
     dimethylethoxy) carbonyl]amino]-2-hydroxybutyl][3-[[(1,1-
     dimethylethoxy)carbonyl]amino]propyl]amino]-16-oxohexadecyl ester,
     monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)
```

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● HCl

RN 246851-97-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

RN 276877-93-1 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''R,2'aS,6''R,7s,8'S,8'aS)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 276877-92-0 CMF C41 H67 N3 O6

Absolute stereochemistry.

CM 2

CRN 64-18-6 CMF C H2 O2

о== сн- он

RN 276877-98-6 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 276878-01-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2R)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 276878-95-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 276878-00-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-(acetylamino)-2(acetyloxy)butyl][3-(acetylamino)propyl]amino]-16-oxohexadecyl ester,
trihydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

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# ●3 HC1

RN 276878-10-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 276878-09-2 CMF C41 H67 N3 O6

Absolute stereochemistry.

CM 2

CRN 64-18-6 CMF C H2 O2

О=== СН- ОН

RN 276878-14-9 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
mono(hydrochloride-d), (2S,2''R,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 276878-13-8 278168-14-2 278168-16-4

278168-65-3 278168-66-4

RL: PRP (Properties)

(mol. modeling; enantioselective total syntheses of isocrambescidin 800 and isocrambescidin 657)

RN 276878-13-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-methoxy-16-oxohexadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

RN 278168-14-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, methyl ester, conjugate monoacid,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● H+

RN 278168-16-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, methyl ester, conjugate monoacid,
(2S,2''S,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● H+

RN 278168-65-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, methyl ester, conjugate monoacid,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

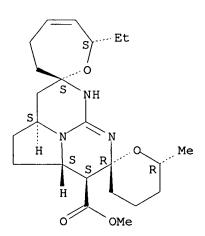
Absolute stereochemistry.

● H+

RN 278168-66-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, methyl ester, conjugate monoacid,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● H+

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 21 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2000:293395 CAPLUS
- DN 133:43696
- TI A Practical Entry to the Crambescidin Family of Guanidine Alkaloids. Enantioselective Total Syntheses of Ptilomycalin A, Crambescidin 657 and Its Methyl Ester (Neofolitispates 2), and Crambescidin 800
- AU Coffey, D. Scott; McDonald, Andrew I.; Overman, Larry E.; Rabinowitz, Michael H.; Renhowe, Paul A.
- CS Department of Chemistry, University of California, Irvine, CA, 92697-2025, USA
- SO Journal of the American Chemical Society (2000), 122(20), 4893-4903 CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 133:43696
- Among the most structurally remarkable guanidine natural products are the AB crambescidin/ptilomycalin A family of marine alkaloids. The evolution of a practical strategy for preparing pharmacol. significant crambescidin/ptilomycalin A alkaloids that lack oxidation at C13 is described. The first total syntheses of crambescidin 800 (2), crambescidin 657 (6), and neofolitispate 2 (7) are reported in full detail. The central strategic step in these convergent total syntheses is tethered Biginelli condensation of a  $\beta$ -keto ester with an ureido aminal to combine all carbons of the quanidine nucleus and set the pivotal C10-C13 stereo-relationship. The total synthesis of crambescidin 800 was accomplished in 3% overall yield from com. available 3-butyn-1-ol by way of 16 isolated and purified intermediates. Full details of our earlier total synthesis of ptilomycalin A (1) are also presented. The total syntheses described in this disclosure confirm the stereochem. assignments of 1, 2, 6, and 7 and rigorously establish that the absolute configuration of the hydroxyspermidine side chain of crambescidin 800 is S.
- - (absolute configuration; enantioselective total synthesis of crambescidin 657, neofolitispate 2, and crambescidin 800)
- RN 275808-03-2 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
  (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

IT 275808-54-3P 275808-55-4P 275808-56-5P

275823-78-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(enantioselective total synthesis of crambescidin 657, neofolitispate 2, and crambescidin 800)

RN 275808-54-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)- (9CI) (CA INDEX NAME)

RN 275808-55-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 275808-56-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

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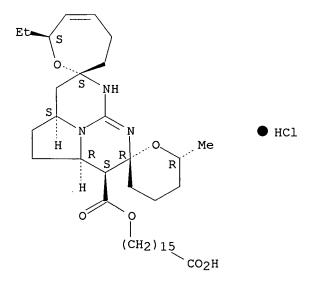
PAGE 2-A

● HCl

RN 275823-78-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 214215-58-4P, Crambescidin 657 229160-51-4P,

Neofolitispate 2 275808-57-6P 275808-58-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (enantioselective total synthesis of crambescidin 657, neofolitispate 2, and crambescidin 800)
RN 214215-58-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
 (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 229160-51-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-methoxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 275808-57-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-(acetylamino)-2(acetyloxy)butyl][3-(acetylamino)propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

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● HCl

(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 275808-58-7 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[(2S)-2-[(2S)-3,3,3-trifluoro-2methoxy-1-oxo-2-phenylpropoxy]-4-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]butyl][3-[[(2S)-3,3,3-trifluoro-2-methoxy-1-oxo-2phenylpropyl]amino]propyl]amino]hexadecyl ester, monohydrochloride,

Absolute stereochemistry.

PAGE 2-A

● HCl

IT 162145-92-8P 162240-64-4P 275808-01-0P,
 (-)-Ptilomycalin A hydrochloride 275808-29-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (enantioselective total synthesis of ptilomycalin A)
RN 162145-92-8 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 16-[[4-[[(1,1-dimethylethoxy)carbonyl]amino]butyl][3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 162145-91-7 CMF C55 H96 N6 O9

Absolute stereochemistry. Rotation (-).

CM 2

CRN 64-18-6 CMF C H2 O2

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RN 162240-64-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[4-[[(1,1-dimethylethoxy)carbonyl]amino]
butyl][3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)-, monoformate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 162240-63-3 CMF C55 H96 N6 O9

CM 2

CRN 64-18-6 CMF C H2 O2

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RN 275808-01-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, trihydrochloride, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

# ●3 HCl

RN 275808-29-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'R,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 275808-28-1 CMF C41 H67 N3 O6

CM 2

CRN 64-18-6 CMF C H2 O2

О=== СН− ОН

IT 125422-23-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (enantioselective total synthesis of ptilomycalin A)

RN 125422-23-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[4-[(trifluoroacetyl)amino]butyl]
[3-[(trifluoroacetyl)amino]propyl]amino]hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 125422-22-2 CMF C49 H78 F6 N6 O7

Absolute stereochemistry. Rotation (-).

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:82453 CAPLUS

DN 132:251285

TI Practical and stereoselective synthesis of a pentacyclic guanidine system: synthetic studies toward ptilomycalin A and related compounds

AU Nagasawa, Kazuo; Georgieva, Angelina; Nakata, Tadashi

CS RIKEN (The Institute of Physical and Chemical Research), Wako, 351-0198, Japan

SO Tetrahedron (1999), Volume Date 2000, 56(2), 187-192 CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier Science Ltd.

DT Journal

LA English

OS CASREACT 132:251285

AB Sym. pentacyclic guanidine compds., e.g. I, were synthesized based on the construction of 2,5-disubstituted pyrrolidines via sequential 1,3-dipolar cycloaddn. and the formation of pentacyclic guanidine via guanylation followed by double N,O-acetalization. The present synthesis will provide a potential route for the synthesis towards ptilomycalin A and 13,14,15-isocrambescidin 800.

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

RN 151121-78-7 CAPLUS

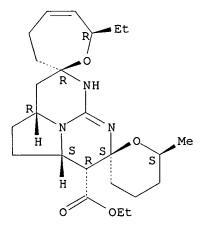
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)(9CI) (CA INDEX NAME)

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10/815,023

- L11 ANSWER 23 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2000:44102 CAPLUS
- DN 132:191911
- TI Novel polycyclic guanidine alkaloids from two marine sponges of the genus Monanchora
- AU Braekman, J. C.; Daloze, D.; Tavares, R.; Hajdu, E.; Van Soest, R. W. M.
- CS Laboratory of Bio-organic Chemistry Department of Organic Chemistry Faculty of Sciences, University of Brussels, Brussels, 1050, Belg.
- SO Journal of Natural Products (2000), 63(2), 193-196 CODEN: JNPRDF; ISSN: 0163-3864
- PB American Chemical Society
- DT Journal
- LA English
- AB Two marine sponges of the genus Monanchora (Poecilosclerida, Crambeidae) have been found to contain new polycyclic guanidine alkaloids bearing the (5,6,8b)-triazaperhydroacenaphthylene skeleton. Their structures have been determined by detailed spectroscopic anal. Dehydrobatzelladine C (I) has been isolated from M. arbuscula and crambescidins 359 (II) and 431 (III) from M. unguiculata. The chemotaxonomic implications of these findings are discussed.
- IT 259734-00-4P, Crambescidin 431
  RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study);
  OCCU (Occurrence); PREP (Preparation)
  - (polycyclic guanidine alkaloids from marine sponges of genus Monanchora)
- RN 259734-00-4 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, ethyl ester, (2R,2''S,2'aR,6''S,7R,8'R,8'aS)rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown. Currently available stereo shown.



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 24 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2000:21284 CAPLUS
- DN 132:234443
- TI The guanidine metabolites of Ptilocaulis spiculifer and related compounds; isolation and synthesis
- AU Heys, Laura; Moore, Christopher G.; Murphy, Patrick J.
- CS Dep. Chem., University of Wales, Bangor, Gwynedd, LL57 2UW, UK
- SO Chemical Society Reviews (2000), 29(1), 57-67 CODEN: CSRVBR; ISSN: 0306-0012
- PB Royal Society of Chemistry
- DT Journal; General Review
- LA English
- AB A review with 33 refs. Marine natural products possessing guanidine functionalities display a considerable array of biol. activity and not surprisingly have attracted considerable synthetic interest. This review discusses the isolation of several guanidine containing metabolites, primarily from the sponge Ptilocaulis spiculifer, but also from other marine organisms. It also explores the synthetic methodologies adopted for their preparation and speculates on the structural similarity of the metabolite ptilomycalin A to abiotic guanidine based anionic receptor mols.
- IT 124512-47-6P, Ptilomycalin A
   RL: BOC (Biological occurrence); BSU (Biological study, unclassified); SPN
   (Synthetic preparation); BIOL (Biological study); OCCU (Occurrence); PREP
   (Preparation)

(isolation and synthesis of guanidine metabolites of Ptilocaulis spiculifer and related compds.)

- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
  NAME)

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

#### 10/815,023

L11 ANSWER 25 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:422850 CAPLUS

DN 131:286685

TI Enantioselective Total Synthesis of 13,14,15-Isocrambescidin 800

AU Coffey, D. Scott; McDonald, Andrew I.; Overman, Larry E.; Stappenbeck, Frank

CS Department of Chemistry, University of California, Irvine, CA, 92697-2025, USA

SO Journal of the American Chemical Society (1999), 121(29), 6944-6945 CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

OS CASREACT 131:286685

AB The first enantioselective total synthesis of 13,14,15-isocrambescidin 800, a rare member of the crambescidin family, was accomplished via the tethered-Biginelli condensation of the guanidino aminal intermediate of I with II and the absolute configuration of the hydroxyspermidine side chain was established as S.

IT 151121-78-7P, Isocrambescidin 800 246266-20-6P
246266-22-8P 246516-57-4P 246851-97-8P,
(-)-13,14,15-Isocrambescidin 800 trihydrochloride
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(enantioselective preparation of 13,14,15-isocrambescidin 800) RN 151121-78-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 246266-20-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester, monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 246266-22-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-[[(1,1dimethylethoxy)carbonyl]amino]-2-hydroxybutyl][3-[[(1,1dimethylethoxy)carbonyl]amino]propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

PAGE 2-A

● HCl

RN 246516-57-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 246851-97-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, trihydrochloride,
(2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

IT 246266-23-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (enantioselective preparation of 13,14,15-isocrambescidin 800)

RN 246266-23-9 CAPLUS

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-(acetylamino)-2(acetyloxy)butyl][3-(acetylamino)propyl]amino]-16-oxohexadecyl ester,
monohydrochloride, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

### PAGE 1-A

PAGE 2-A

● HCl

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10/815,023

- L11 ANSWER 26 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1999:287446 CAPLUS
- DN 131:71418
- TI Neofolitispates, pentacyclic guanidine alkaloids from the sponge-Neofolitispa dianchora
- AU Venkateswarlu, Y.; Reddy, M. Venkata Rami; Ramesh, P.; Rao, J. Venkateswara
- CS Organic Chemistry Division-I and Toxicology Division, Indian Institute of Chemical Technology, Hyderabad, 500 007, India
- SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1999), 38B(2), 254-256 CODEN: IJSBDB; ISSN: 0376-4699
- PB National Institute of Science Communication, CSIR
- DT Journal
- LA English
- AB Neofolitispates 1-3 (I, n=14, 13, 12), the pentacyclic guanidine alkaloids have been isolated from the sponge Neofolitispa dianchora and characterized by spectral studies. These compds. show antiviral activity against Hepatitis-B virus.
- IT 229160-50-3, Neofolitispate 1 229160-52-5,

Neofolitispate 3

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)

(neofolitispates, pentacyclic guanidine alkaloids from sponge Neofolitispa dianchora)

RN 229160-50-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 17-methoxy-17-oxoheptadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 229160-52-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, 15-methoxy-15-oxopentadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 229160-51-4P, Neofolitispate 2

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(neofolitispates, pentacyclic guanidine alkaloids from sponge Neofolitispa dianchora)

RN 229160-51-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-methoxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 27 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
L11
     1998:706210 CAPLUS
AN
DN
     129:288014
ΤI
     Crambescidin isolation and structural characterization and antimicrobial
     and cytotoxic activity from marine sponge Crambe crambe
     Shi, Jian-gong; Sun, Furong; Rinehart, Kenneth L.
IN
PA
     Pharma Mar, S. A., Spain; Linek, Ernest, V.
so
     PCT Int. Appl., 36 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
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                                            _____
     WO 9846575
                                19981022 WO 1998-US7644
                                                                    19980414
PΤ
                          A1
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
     US 6028077
                                 20000222
                                          US 1998-58507
                                                                     19980410
                          Α
                                             CA 1998-2286738
     CA 2286738
                          AA
                                 19981022
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                                            AU 1998-71241
     AU 9871241
                          A1
                                 19981111
                                                                     19980414
     AU 752529
                          B2
                                 20020919
     EP 975606
                          A1
                                20000202
                                           EP 1998-918287
                                                                    19980414
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     BR 9808905
                                 20000801
                                             BR 1998-8905
                                                                     19980414
                          Α
     JP 2002516609
                          т2
                                 20020604
                                             JP 1998-544276
                                                                    19980414
                                             NO 1999-5015
     NO 9905015
                                 19991116
                                                                     19991014
                          Α
     NO 313637
                          B1
                                 20021104
PRAI US 1997-43327P
                          Ρ
                                 19970415
     WO 1998-US7644
                          W
                                 19980414
AB
     Together with the known crambescidins and ptilomycalin A, two new minor
     crambescidins 834, 818 with a chlorinated spermidine unit and four new
     minor crambescidins 673, 687, 657 and 13,14,15-isocrambescidin 657 without
     a spermidine derivative unit have been obtained by FABMS guided isolation from
     exts. of the Mediterranean sponge Crambe crambe. Their structures were
     elucidated by interpretation of spectral data. In a parallel bioassay
     against L1210 murine leukemia cells, crambescidins 834, 818 and 657 were
     shown to be five times as cytotoxic as the knows crambescidin 816.
     Crambescidins with a spermidine or spermidine derivative unit also exhibited
     antimicrobial activity against Rhodotorula glutinis. Pharmaceutical
     formulations are also claimed.
     214215-50-6P, Crambescidin 834 214215-52-8P,
IT
     Crambescidin 818 214215-54-0P, Crambescidin 673 214215-56-2P, Crambescidin 687 214215-58-4P,
     Crambescidin 657 214215-60-8P, 13,14,15-Isocrambescidin 657
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR
     (Purification or recovery); BIOL (Biological study); OCCU (Occurrence);
     PREP (Preparation)
        (crambescidin isolation and structural characterization and
        antimicrobial and cytotoxic activity from marine sponge Crambe crambe)
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RN

214215-50-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[(4-amino-2-chlorobutyl)(3-aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aS)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Currently available stereo shown.

RN 214215-52-8 CAPLUS

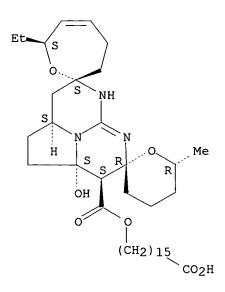
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-amino-2-chlorobutyl)(3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-). Currently available stereo shown.

RN 214215-54-0 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 214215-56-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-methoxy-16-oxohexadecyl
ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

RN 214215-58-4 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 214215-60-8 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2'' [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
 ,8'a-dodecahydro-6''-methyl-, 15-carboxypentadecyl ester,
 (2S,2''S,2'aS,6''R,7S,8'R,8'aS)- (9CI) (CA INDEX NAME)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 28 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1998:392098 CAPLUS
- DN 129:38964
- TI Crambescidins: new antiviral and cytotoxic compounds from the sponge Crambe crambe
- IN Rinehart, Kenneth L.; Jares-Erijman, Elizabeth A.
- PA PharmaMar, S.A., Spain
- SO U.S., 19 pp., Cont. of U. S. Ser. No. 944,152. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				<del>-</del>	
ΡI	US 5756734	Α	19980526	US 1995-476871	19950607
	US 5952332	Α	19990914	US 1998-40580	19980318
PRAI	US 1992-944152	<b>A</b> 1	19920911		
	US 1995-476871	A1	19950607		

- The present invention is directed to several novel compds. isolated from the sponge Crambe crambe, and designated herein as Crambescidin 816 (I, R1 = R2 = OH, n = 13), Crambescidin 830 (I, R1 = R2 = OH, n = 14), Crambescidin 844 (I, R1 = R2 = OH, n = 15), and Crambescidin 800 (I, R1 = H, R2 = OH, n = 13), as well as several derivs. thereof. The 816, 830, 844 and 800 compds. are four preferred species of complex pentacyclic guanidines linked by a linear  $\omega$ -hydroxy fatty acid to a hydroxyspermidine, that have been obtained by a bioassay-guided isolation procedure, involving solvent partition and chromatog. on Sephadex LH-20, cyano, and C-18 columns, from exts. of the red, encrusting sponge Crambe crambe (Order Poecilosclerida, Family Esperiopsidae).
- IT 135257-45-3P, Crambescidin 816 135257-46-4P, Crambescidin 800

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(crambescidins, new antiviral and cytotoxic compds. from sponge Crambe crambe)

- RN 135257-45-3 CAPLUS

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 135257-47-5P, Crambescidin 830 135283-73-7P, Crambescidin 844

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(crambescidins, new antiviral and cytotoxic compds. from sponge Crambe crambe)

RN 135257-47-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-

[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 17-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-17-oxoheptadecyl ester (9CI) (CA INDEX NAME)

RN 135283-73-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 18-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-18-oxooctadecyl ester (9CI) (CA INDEX NAME)

IT 208395-86-2P 208395-90-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(crambescidins, new antiviral and cytotoxic compds. from sponge Crambe crambe)

RN 208395-86-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-(acetylamino)-2(acetyloxy)butyl][3-(acetylamino)propyl]amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 208395-90-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-(acetylamino)-2(acetyloxy)butyl][3-(acetylamino)propyl]amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 124512-47-6, Ptilomycalin a

RL: PRP (Properties)

(crambescidins, new antiviral and cytotoxic compds. from sponge Crambe crambe)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16-

oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-(9CI) (CA INDEX NAME)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 29 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:288578 CAPLUS

DN 128:330412

TI Strategies for the design of biomimetic oxoanion ionophores for ion-selective electrodes

AU Ball, J. Christopher; Hutchins, Richard S.; Raposo, Cesar; Moran, Joaquin R.; Alajarin, Mateo; Molina, Pedro; Bachas, Leonidas G.

CS Dep. Chem., Univ. Kentucky, Lexington, KY, 40506-0055, USA

SO ACS Symposium Series (1998), 690 (Polymers in Sensors), 248-256 CODEN: ACSMC8; ISSN: 0097-6156

PB American Chemical Society

DT Journal

LA English

AB Biomimetic ionophores were developed for use in ion-selective electrodes (ISEs). By mimicking the strong interactions between certain biol. mols. and oxoanions, ionophores were designed that demonstrate high selectivity for particular oxoanions. Ionophores based on the guanidinium functional group and a derivatized urea group were prepared ISEs for hydrogen sulfite, salicylate, and ibuprofen based on these ionophores are described.

IT 124512-47-6, Ptilomycalin A
 RL: ARG (Analytical reagent use); DEV (Device component use); ANST
 (Analytical study); USES (Uses)

(hydrogen sulfite, salicylate, and ibuprofen determination by ion-selective electrodes based on biomimetic ionophores)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:199700 CAPLUS

DN 128:215457

TI In vitro antiviral activity on dengue virus of marine natural products

AU Laille, M.; Gerald, F.; Debitus, C.

CS Institut Pasteur, Noumea, 98845, New Caledonia

SO Cellular and Molecular Life Sciences (1998), 54(2), 167-170 CODEN: CMLSFI; ISSN: 1420-682X

PB Birkhaeuser Verlag

DT Journal

LA English

AB Metabolites isolated from marine invertebrates, callipeltin A, crambescidin, tilomycalin A, celeromycalin, gymnochrome B, gymnochrome D, and isogymnochrome D were tested on a in vitro bioassay using the dengue virus 1. Only gymnochrome D and isogymnochrome D isolated from the living fossil crinoid Gymnocrinus richeri are highly potent dengue antiviral agents.

IT 124512-47-6, Ptilomycalin A 135257-46-4, Crambescidin
800 163597-72-6, Celeromycalin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(in vitro antiviral activity on dengue virus of marine natural products)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

RN 163597-72-6 CAPLUS

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (14R)-16-[(4-aminobutyl)(3-aminopropyl)amino]-14-hydroxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

- L11 ANSWER 31 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1996:526062 CAPLUS
- DN 125:215428
- TI Ptilomycalin A, a novel Na+,K+- or Ca2+-ATPase inhibitor, competitively interacts with ATP at its binding site
- AU Ohizumi, Yasushi; Sasaki, Susumu; Kusumi, Takenori; Ohtani, Ikuko I.
- CS Department of Pharmaceutical Molecular Biology, Faculty of Pharmaceutical Sciences, Tohoku University, Aoba, Aramaki, Aoba-ku, Sendai, Japan
- SO European Journal of Pharmacology (1996), 310(1), 95-98 CODEN: EJPHAZ; ISSN: 0014-2999
- PB Elsevier
- DT Journal
- LA English
- AB Ptilomycalin A inhibited the brain Na+, K+-ATPase and Ca2+ -ATPase from skeletal sarcoplasmic reticulum with an IC50 value of 2 μM and 10 μM, resp. Kinetic anal. of the inhibitory effects of ptilomycalin A suggests that the inhibition of Na+, K+-ATPase is a competitive-, an uncompetitive- and an anticompetitive-type with respect to ATP, Na+ and K+, resp. The inhibition of Ca2+-ATPase by ptilomycalin A is a competitive- or an uncompetitive-type with respect to ATP or Ca2+, resp. These results suggest that ptilomycalin A interacts with ATP at the ATP binding site of Na+, K+-ATPase or Ca2+-ATPase. Ptilomycalin A has become a useful biochem. tool for clarifying the ATP binding site in both enzymes.
- IT 124512-47-6, Ptilomycalin A
  RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(ptilomycalin A competitively interacts with ATP-binding sites of Na+, K+- and Ca2+-ATPase)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

## 10/815,023

- L11 ANSWER 32 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1996:376459 CAPLUS
- DN 125:114928
- TI Biomimetic model studies towards ptilomycalin A
- AU Murphy, Patrick J.; Williams, Harri Lloyd; Hibbs, David E.; Hursthouse, Michael B.; Malik, K. M. Abdul
- CS Dep. Chem., Univ. Wales, Gwynedd, LL57 2UW, UK
- SO Tetrahedron (1996), 52(24), 8315-8332 CODEN: TETRAB; ISSN: 0040-4020
- PB Elsevier
- DT Journal
- LA English
- OS CASREACT 125:114928
- AB Model compds., such as tetracycles I and pentacycles II (m = n = 0; m = n = 1; m = 0, n = 1), were prepared to illustrate a biomimetic approach to the synthesis of the guanidine containing natural product ptilomycalin A.
- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
  NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

L11 ANSWER 33 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:270070 CAPLUS

DN 125:11195

TI An antibody catalyzed ester hydrolysis and a synthetic approach towards agelastatin A

AU Anderson, Glen Thomas

CS Pennsylvania State Univ., University Park, PA, USA

SO (1996) 118 pp. Avail.: Univ. Microfilms Int., Order No. DA9612684 From: Diss. Abstr. Int., B 1996, 56(12), 6741

DT Dissertation

LA English

AB Unavailable

IT 124512-47-6P, Ptilomycalin a

RL: PNU (Preparation, unclassified); PREP (Preparation) (antibody catalyzed ester hydrolysis and a synthetic approach towards agelastatin a)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

- L11 ANSWER 34 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1996:154421 CAPLUS
- DN 124:317586
- TI Crystallographic evidence for the proposed host behavior of ptilomycalin A
- AU Murphy, Patrick J.; Williams, Harri Lloyd; Hibbs, David E.; Hursthouse, Michael B.; Malik, K. M. Abdul
- CS Dep. Chem., Univ. Wales, Bangor, LL57 2UW, UK
- SO Chemical Communications (Cambridge) (1996), (3), 445-7 CODEN: CHCOFS; ISSN: 1359-7345
- PB Royal Society of Chemistry
- DT Journal
- LA English
- AB The X-ray crystal structures of model compds, e.g. pentacyclic guanidine I, were determined and used as evidence to support proposed anionic recognition in the alkaloid ptilomycalin A.
- IT 124512-47-6, Ptilomycalin A
  RL: PRP (Properties)

(crystallog. evidence for the proposed host behavior of ptilomycalin A)

- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
  NAME)

L11 ANSWER 35 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:102088 CAPLUS

DN 124:232861

TI Synthesis of bicyclic guanidines from pyrrolidin-2-one

AU Louwrier, Saskia; Tuynman, Antonin; Hiemstra, Henk

CS Amsterdam Inst. Mol. Studies, Univ. Amsterdam, Amsterdam, 1018 WS, Neth.

SO Tetrahedron (1996), 52(7), 2629-46 CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier

DT Journal

LA English

OS CASREACT 124:232861

AB The syntheses of three bicyclic guanidines I (R = Ph, R1 = H; R = n-Pr, R1 = H; R = Me, R1 = CO2Me), as model compds. for the guanidine alkaloid ptilomycalin A, are described. The guanidines are prepared from pyrrolidin-2-one via an N-acyliminium ion coupling reaction with silyl enol ethers and a direct guanylation with bis-Boc-thiourea and HgCl2 as the key steps.

IT 124512-47-6P, Ptilomycalin A

RL: PNU (Preparation, unclassified); PREP (Preparation) (synthesis of bicyclic guanidines as model compds. for ptilomycalin A from pyrrolidinone)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

L11 ANSWER 36 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:102087 CAPLUS

DN 124:261438

TI Studies towards the synthesis of (+)-ptilomycalin A; stereoselective N-acyliminium ion coupling reactions to enantiopure C-2 substituted lactams

AU Louwrier, Saskia; Ostendorf, Martin; Boom, Arnoud; Hiemstra, Henk; Speckamp, W. Nico

CS Amsterdam Inst. Mol. Studies, Univ. Amsterdam, Amsterdam, 1018 WS, Neth.

SO Tetrahedron (1996), 52(7), 2603-28 CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier

DT Journal

LA English

OS CASREACT 124:261438

AB Highly stereoselective N-acyliminium ion coupling reactions of  $\beta\text{-ketoester}$  derived silyl enol ethers with enantiopure lactams derived from (S)-malic acid are reported. This reaction type is applied in the synthesis of the enantiopure C-2 substituted lactam I, a plausible intermediate in a projected synthesis of ptilomycalin A.

IT 124512-47-6P, (-)-Ptilomycalin A

RL: PNU (Preparation, unclassified); PREP (Preparation) (stereoselective N-acyliminium ion coupling reactions to enantiopure C-2 substituted lactams directed toward synthesis of ptilomycalin A)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

- L11 ANSWER 37 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1996:97102 CAPLUS
- DN 124:232860
- TI Studies towards the synthesis of guanidine alkaloids; synthesis of a tricyclic quanidine from succinimide
- AU Louwrier, Saskia; Ostendorf, Martin; Tuynman, Antonin; Hiemstra, Henk
- CS Amsterdam Inst. Mol. Studies, Univ. Amsterdam, Amsterdam, 1018 WS, Neth.
- SO Tetrahedron Letters (1996), 37(6), 905-8 CODEN: TELEAY; ISSN: 0040-4039
- PB Elsevier
- DT Journal
- LA English
- OS CASREACT 124:232860
- AB The synthesis of a tricyclic guanidine I as a model compound for ptilomycalin A and related guanidine alkaloids is described. The synthesis starts from succinimide and features an N-acyliminium ion coupling, an Eschenmoser sulfide-contraction and an N-guanylation as the key steps.
- RN 124512-47-6 CAPLUS

  CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

# 10/815,023

L11 ANSWER 38 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:61001 CAPLUS

DN 124:261426

TI Ptilomycalin A and other quanidinium-anion receptors

AU Koert, Ulrich

CS Univ. Marburg, Marburg, Germany

SO Nachrichten aus Chemie, Technik und Laboratorium (1995), 43(12), 1302-4, 1306-9

CODEN: NCTLDI; ISSN: 0341-5163

PB VCH

DT Journal; General Review

LA German

AB A review with 15 refs. on syntheses of the title compds.

IT 124512-47-6P, Ptilomycalin A

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of ptilomycalin A and other guanidinium anion-receptors)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

L11 ANSWER 39 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:1000242 CAPLUS

DN 124:117675

TI Catalytic Antibodies in Synthesis: Design and Synthesis of a Hapten for Application to the Preparation of a Scalemic Pyrrolidine Ring Synthon for Ptilomycalin A

AU Anderson, Glen T.; Alexander, Michael D.; Taylor, Scott D.; Smithrud, David B.; Benkovic, Stephen J.; Weinreb, Steven M.

CS Department of Chemistry, Pennsylvania State University, University Park, PA, 16802, USA

SO Journal of Organic Chemistry (1996), 61(1), 125-32 CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 124:117675

AB A catalytic antibody-based approach toward the synthesis of an optically active pyrrolidine ring synthon potentially useful for ptilomycalin A is described. Enantiomerically pure hapten I was designed and constructed with the eventual goal of generating antibodies for the enantioselective partial hydrolysis of a meso diester such as into a monoacid. This transition state analog possesses a phosphonate group containing the requisite oxyanionic character of the tetrahedral intermediate for ester hydrolysis. A newly developed carbamate-based linker, which was found to be much more hydrolytically stable than the commonly used glutarate ester, was developed for coupling of the hapten to a carrier protein.

IT 124512-47-6P, Ptilomycalin A

RL: PNU (Preparation, unclassified); PREP (Preparation) (catalytic antibodies approach to synthesis of a hapten for application to preparation of a scalemic pyrrolidine ring synthon for ptilomycalin a)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

L11 ANSWER 40 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:881121 CAPLUS

DN 123:340515

TI Synthesis of a structural analog of ptilomycalin A

AU Grillot, Anne-Laure; Hart, David J.

CS Dep. Chem., Ohio State Univ., Columbus, OH, 43210, USA

SO Tetrahedron (1995), 51(42), 11377-92 CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier

DT Journal

LA English

OS CASREACT 123:340515

AB Ptilomycalin A analog I was prepared in 13 steps from BrCH2C(:CH2)CO2CMe3 via coupling of the corresponding amido alc. with the guanidiniumcarboxylate.

IT 124512-47-6DP, Ptilomycalin A, analogs
RL: PNU (Preparation, unclassified); PREP (Preparation)
(synthesis of a structural analog of ptilomycalin A)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

L11 ANSWER 41 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:852174 CAPLUS

DN 123:286366

TI Enantioselective total synthesis of (+)-isolaurepinnacin and enantioselective total synthesis of (-)-ptilomycalin a

AU Renhowe, Paul Allan

CS Univ. of California, Irvine, CA, USA

SO (1995) 148 pp. Avail.: Univ. Microfilms Int., Order No. DA9525158 From: Diss. Abstr. Int., B 1995, 56(3), 1429

DT Dissertation

LA English

AB Unavailable

IT 124512-47-6P, Ptilomycalin A

RL: SPN (Synthetic preparation); PREP (Preparation)
(enantioselective total synthesis of (+)-isolaurepinnacin and
(-)-ptilomycalin A)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

L11 ANSWER 42 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:484163 CAPLUS

DN 123:5862

TI Ptilomycalin A, crambescidin 800 and related new highly cytotoxic guanidine alkaloids from the starfishes Fromia monilis and Celerina heffernani

AU Palagiano, Elio; De Marino, Simona; Minale, Luigi; Riccio, Raffaele; Zollo, Franco; Iorizzi, Maria; Carre, Jean Baptiste; Debitus, Cecile; Lucarain, Laetitia; et al.

CS Dip. Chimica Sostanze Naturali "Federico II", Univ. Napoli, Napoli, 80131, Italy

SO Tetrahedron (1995), 51(12), 3675-82 CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier

DT Journal

LA English

AB Two novel pentacyclic guanidine alkaloids, celeromycalin and fromiamycalin, were isolated from the New Caledonian starfishes C. heffernani and F. monilis, resp. Also found in C. heffernani are the known ptilomycalin A and crambescidin 800, which latter has been also isolated from F. monilis. The new compds. exhibited an high cytotoxic activity like the previous crambescidins. These complex pentacyclic guanidines are typical sponges metabolites and their occurrence in starfishes is noteworthy. F. monilis also contained the less active component, made up from an hydroxyspermidine residue linked to a long chain  $\omega$ -hydroxyacid.

IT 163597-72-6, Celeromycalin 163597-73-7, Fromiamycalin RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)

(celeromycalin and fromiamycalin isolation and structural characterization and activity from starfish)

RN 163597-72-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, (14R)-16-[(4-aminobutyl)(3aminopropyl)amino]-14-hydroxy-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

$$H_{2}N-(CH_{2})_{4}-N-C-CH_{2}-CH-(CH_{2})_{13}-O-C$$
 $H_{2}N-(CH_{2})_{3}$  OH O

RN 163597-73-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'

,8'a-dodecahydro-6''-methyl-, 15-[1-(4-amino-2-hydroxybutyl)-1,4,5,6-tetrahydro-2-pyrimidinyl]pentadecyl ester, [2'aS-[2'a $\alpha$ ,4' $\alpha$ (R\*),7' $\alpha$ (S\*),8' $\beta$ (R\*),8'a $\alpha$ ]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

NAME)

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

## 10/815,023

L11 ANSWER 43 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:397824 CAPLUS

DN 122:210092

TI Novel Alkaloids from the Sponge Batzella sp.: Inhibitors of HIV qp120-Human CD4 Binding

AU Patil, Ashok D.; Kumar, N. Vasant; Kokke, Wilhelmus C.; Bean, Mark F.; Freyer, Alan J.; Brosse, Charles De; Mai, Shing; Truneh, Alemseged; Carte, Brad; et al.

CS Department of Biomolecular Discovery, SmithKline Beecham Pharmaceuticals, King of Prussia, PA, 19406-0939, USA

SO Journal of Organic Chemistry (1995), 60(5), 1182-8 CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

AB The Caribbean sponge Batzella sp. contains a number of guanidine alkaloids, two of which, batzelladines A (1) and B (2), inhibit the binding of HIVgp-120 to CD4 and are therefore potential inhibitors of HIV. In addition to the known metabolites ptilomycalin A (6), ptilocaulin (7), crambescin A (8), crambescidin 800 (9), and crambescidin 816 (10), Batzella sp. contains five new alkaloids, batzelladines A-E (1-5), the structures of which were elucidated by interpretation of spectral data and chemical degradation

IT 124512-47-6, Ptilomycalin A 135257-45-3, Crambescidin 816 135257-46-4, Crambescidin 800

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (novel alkaloids from sponge Batzella as inhibitors of HIV gp120)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 135257-45-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'

,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

## 10/815,023

L11 ANSWER 44 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:397708 CAPLUS

DN 122:291250

TI Enantioselective Total Synthesis of (-)-Ptilomycalin A

AU Overman, Larry E.; Rabinowitz, Michael H.; Renhowe, Paul A.

CS Department of Chemistry, University of California, Irvine, CA, 92717-2025, USA

SO Journal of the American Chemical Society (1995), 117(9), 2657-8 CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

OS CASREACT 122:291250

AB The total synthesis of the title compound (I) was accomplished in a convergent from three readily available enantioenriched secondary alcs.

IT 162145-90-6P 162145-92-8P 162240-64-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(enantioselective total synthesis of ptilomycalin A)

RN 162145-90-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-(2-propenyloxy)hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (9CI) (CA INDEX NAME)

CM 1

CRN 162145-89-3 CMF C41 H67 N3 O6

Absolute stereochemistry. Rotation (-).

CM 2

CRN 64-18-6

CMF C H2 O2

0== СН- ОН

RN 162145-92-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[4-[[(1,1-dimethylethoxy)carbonyl]amino]
butyl][3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, monoformate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 162145-91-7 CMF C55 H96 N6 O9

Absolute stereochemistry. Rotation (-).

CM 2

CRN 64-18-6 CMF C H2 O2

о== сн− он

RN 162240-64-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[4-[[(1,1-dimethylethoxy)carbonyl]amino]
butyl][3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'R,8'aR)-, monoformate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 162240-63-3 CMF C55 H96 N6 O9

Absolute stereochemistry. Rotation (+).

2 CM

CRN 64-18-6 CMF C H2 O2

о=== сн- он

124512-47-6P, (-)-Ptilomycalin A 125422-22-2P IT

163181-58-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(enantioselective total synthesis of ptilomycalin A)

RN124512-47-6 CAPLUS

Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-CN [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

RN 125422-22-2 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[4-[(trifluoroacetyl)amino]butyl][3-[(trifluoroacetyl)amino]propyl]amino]hexadecyl ester, [2'aS-[2'a $\alpha$ ,4' $\alpha$ (R\*),7' $\alpha$ (S\*),8' $\beta$ ,8'a $\alpha$ ]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 163181-58-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8',8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16-oxohexadecyl ester, monohydrochloride, [2'aS-[2'a $\alpha$ ,4' $\alpha$ (R\*),7'. alpha.(S\*),8' $\beta$ ,8'a $\alpha$ ]]- (9CI) (CA INDEX NAME)

HCl

L11 ANSWER 45 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:169849 CAPLUS

DN 122:10342

TI Total syntheses of (±)-chondrillin, (±)-plakorin, and related peroxy ketals. Development of a general route to 3,6-dihydro-1,2-dioxin-3-ols, and, biomimetic syntheses of (±)-crambines A, B, C1, and C2. Revision of the structures of crambines B and C1, and, biomimetic synthesis of the pentacyclic nucleus of ptilomycalin A

AU Shi, Zhongping

CS Brandeis Univ., USA

SO (1994) 172 pp. Avail.: Univ. Microfilms Int., Order No. DA9417716 From: Diss. Abstr. Int. B 1994, 55(3), 908

DT Dissertation

LA English

AB Unavailable

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

## 10/815,023

- L11 ANSWER 46 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1994:575634 CAPLUS
- DN 121:175634
- TI Isolation of Crambescidin 800 from Monanchora arbuscula (Porifera)
- AU Tavares, R.; Daloze, D.; Braekman, J. C.; Hajdu, E.; Muricy, G.; Van Soest, R. W. M.
- CS Fac. Sciences, Univ. Brussels, Brussels, 1050, Belg.
- SO Biochemical Systematics and Ecology (1994), 22(6), 645-6 CODEN: BSECBU; ISSN: 0305-1978
- DT Journal
- LA English
- AB The occurrence in M. arbuscula of crambescidin 800 and of crambescin-type derivs. that are also present in Crambe crambe, supports a close relationship between these 2 genera.
- IT 135257-46-4, Crambescidin 800
  RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
  BIOL (Biological study); OCCU (Occurrence)
  (of sponge, taxonomy in relation to)
- RN 135257-46-4 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

## 10/815,023

L11 ANSWER 47 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:575530 CAPLUS

DN 121:175530

TI Chromatographic approach to polar compounds: isolation of hydrophilic constituents of the marine sponge Crambe crambe

AU Berlinch, Roberto Gomes de Souza

CS Inst. Fis. Quim., Univ. Sao Paulo, Sao Carlos, 13560-970, Brazil

SO Quimica Nova (1994), 17(2), 167-71 CODEN: QUNODK; ISSN: 0100-4042

DT Journal

LA English

AB The separation steps utilized for the isolation of the constituents of the marine sponge Crambe crambe polar exts. are discussed in detail. Many members of the crambescidine family and its homologs were isolated.

IT 135257-45-3, Crambescidine 816 135257-46-4,
Crambescidine 800 151121-78-7
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)
(of sponge)

RN 135257-45-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

RN 151121-78-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)(9CI) (CA INDEX NAME)

- ANSWER 48 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN L11
- 1994:533825 CAPLUS AN
- DN 121:133825
- TI Synthesis of a pentacyclic model of ptilomycalin A
- ΑU Murphy, Patrick J.; Williams, Harri Lloyd
- Dep. Chem., Univ. Wales, Bangor/Gwynedd, LL57 2UW, UK CS
- Journal of the Chemical Society, Chemical Communications (1994), (7), SO 819-20

CODEN: JCCCAT; ISSN: 0022-4936

- Journal DT
- English LА
- AB The conversion of dienes I (n = 4, 5) into the pentacyclic quanidine compds. II (m = 1, 2) is reported; their preparation illustrates a potentially biomimetic synthetic route to the biol. active natural product ptilomycalin A.
- IT 124512-47-6, Ptilomycalin A RL: RCT (Reactant); RACT (Reactant or reagent) (pentacyclic model fragment for, preparation of)
- ŔN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8' ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

L11 ANSWER 49 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:457763 CAPLUS

DN 121:57763

TI Studies toward the synthesis of ptilomycalin A analogs

AU Grillot, Anne Laure

CS Ohio State Univ., Columbus, OH, USA

SO (1993) 449 pp. Avail.: Univ. Microfilms Int., Order No. DA9411957 From: Diss. Abstr. Int. B, 1994, 54(11), 5666

DT Dissertation

LA English

AB Unavailable

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

L11 ANSWER 50 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:299058 CAPLUS

DN 120:299058

TI Synthetic studies towards ptilomycalin A using a biomimetic approach

AU Murphy, Patrick J.; Williams, Harri Lloyd; Hursthouse, Michael B.; Abdul Malik, K. M.

CS Dep. Chem., Univ. Wales, Bangor/Gwynedd, LL57 2UW, UK

SO Journal of the Chemical Society, Chemical Communications (1994), (1), 119-20

CODEN: JCCCAT; ISSN: 0022-4936

DT Journal

LA English

AB Two model compds., the tetracycle I and the tricycle II are prepared using a biomimetic synthetic approach to the guanidine-containing natural product ptilomycalin A (III).

IT 124512-47-6P, Ptilomycalin A

RL: SPN (Synthetic preparation); PREP (Preparation) (pyrrolopyrimidopyrimidine spiropyranpyrrolopyrimidopyrimidine fragments of, preparation of)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

#### 10/815,023

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ANSWER 51 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
     1994:270940 CAPLUS
AN
DN
     120:270940
TI
     Biomimetic synthesis of the pentacyclic nucleus of ptilomycalin A
ΑU
     Snider, Barry B.; Shi, Zhongping
CS
     Dep. Chem., Brandeis Univ., Waltham, MA, 02254, USA
     Journal of the American Chemical Society (1994), 116(2), 549-57
SO
     CODEN: JACSAT; ISSN: 0002-7863
DT
     Journal
LA
     English
os
     CASREACT 120:270940
     The Me ester of the pentacyclic nucleus of ptilomycalin A (I) has been
AB
     prepared by an efficient, convergent, biogenetic, 14-step route.
     steps involve the conversion of acyclic bis enone II (R = Me3CSiPh2) to I
     in four steps. Michael addition of O-methylisourea to II afforded 52% of a
     mixture of isoureas, which were both converted to 72% of tricyclic animals
     III by ammonolysis. Deprotection of the silyl ethers with HF and
     cyclization with Et3N in MeOH afforded I (pprox 34\% from III) and the
     diastereomer with an equatorial Me ester group (≈26% from III).
IT
     147664-31-1P
     RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
        (biomimetic synthesis of)
RN
     147664-31-1 CAPLUS
     Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-
CN
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-6''-methyl-, methyl ester, [2'aS-
     [2'a\alpha, 4'\alpha(R^*), 7'\alpha(S^*), 8'\beta, 8'a\alpha]] - (9CI)
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Absolute stereochemistry.

INDEX NAME)

TТ

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154631-67-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of)
RN
     154631-67-1 CAPLUS
     Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-
CN
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-6''-methyl-, methyl ester, [2'aS-
     [2'a\alpha, 4'\alpha(R^*), 7'\alpha(S^*), 8'\alpha, 8'a\alpha]] - (9CI) (CA)
     INDEX NAME)
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### 10/815,023

- L11 ANSWER 52 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1993:649766 CAPLUS
- DN 119:249766
- TI Polycyclic guanidine-containing compounds from the Mediterranean sponge Crambe crambe: the structure of 13,14,15-isocrambescidin 800 and the absolute stereochemistry of the pentacyclic guanidine moieties of the crambescidins
- AU Jares-Erijman, Elizabeth A.; Ingrum, April L.; Carney, John R.; Rinehart, Kenneth L.; Sakai, Ryuichi
- CS Roger Adams Lab., Univ. Illinois, Urbana, IL, 61801, USA
- SO Journal of Organic Chemistry (1993), 58(18), 4805-8 CODEN: JOCEAH; ISSN: 0022-3263
- DT Journal
- LA English
- AB The absolute stereochem. of the pentacyclic guanidine moieties of crambescidin 816 (I) and of 13,14,15-isocrambescidin 800 (II), a new member of this family, were determined, based on chiral GC anal. of a derivative of 2-hydroxybutanoic acid, an ozonolysis product of the crambescidins. Significantly less antiviral activity and cytotoxicity were observed for II than form other crambescidins.
- RN 135257-45-3 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
  (2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

- RN 151121-78-7 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)(9CI) (CA INDEX NAME)

### 10/815,023

L11 ANSWER 53 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:646144 CAPLUS

DN 119:246144

TI Polycyclic guanidine alkaloids from the marine sponge Crambe crambe and calcium channel blocker activity of crambescidin 816

AU Berlinck, R. G. S.; Braekman, J. C.; Daloze, D.; Bruno, I.; Riccio, R.; Ferri, S.; Spampinato, S.; Speroni, E.

CS Fac. Sci., Univ. Brussels, Brussels, 1050, Belg.

SO Journal of Natural Products (1993), 56(7), 1007-15 CODEN: JNPRDF; ISSN: 0163-3864

DT Journal

LA English

AB Four pentacyclic guanidine derivs. [crambescidin 800 (I), crambescidin 816 (II), isocrambescidin 800 (III), and crambidine (IV), related to ptilomycalin A] have been isolated from the Mediterranean sponge C. crambe. III and IV are new derivs., the structures of which have been determined on the basis of their spectral properties. The absolute configuration

of II at the stereogenic center C-43 has been determined by applying Mosher's method. Pharmacol. and biol. activities of the Crambe crambe alkaloids are reported. In particular, II was found to have a potent Ca2+ antagonist effect and to inhibit the acetylcholine-induced contraction of guinea pig ileum at very low concns.

IT 135257-45-3, Crambescidin 816 135257-46-4, Crambescidin 800 151121-78-7, Isocrambescidin 800 RL: BIOL (Biological study)

(isolation and biol. and pharmacol. activity of, from marine sponge)

RN 135257-45-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 151121-78-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''S,2'aS,6''R,7S,8'R,8'aS)(9CI) (CA INDEX NAME)

L11 ANSWER 54 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:495899 CAPLUS

DN 119:95899

TI Studies toward the total synthesis of (+)-ptilomycalin A. Use of a tethered Biginelli condensation for the preparation of an advanced tricyclic intermediate

AU Overman, Larry E.; Rabinowitz, Michael H.

CS Dep. Chem., Univ. California, Irvine, CA, 92717-2025, USA

SO Journal of Organic Chemistry (1993), 58(12), 3235-7 CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

OS CASREACT 119:95899

AB The spirotricycle I, a potential intermediate for the enantioselective total synthesis of ptilomycalin A, is prepared in high enantiomeric purity in seven steps from the known  $\beta$ -hydroxy ester (S)-MeO2CCH2CH(OH)CH2CH2CH:CMe2 and nine overall steps from Me acetoacetate. The convergent route developed features the first example of an intramol. ureidoaldehyde condensation of (S)-MeO2CCH2CO(CH2)3CHMeOSiMe2CMe3 with (R)-H2NCONHCH(CH2CH2OH)CH2CH2CH:CMe2 to give pyrrolopyrimidine derivative II (termed a tethered Biginelli condensation).

IT 124512-47-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of intermediate for total synthesis of)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

$$H_2N$$
 $(CH_2)_3$ 
 $H_2N$ 
 $(CH_2)_4$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 
 $(CH_2)_{15}$ 

### 10/815,023

L11 ANSWER 55 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:495885 CAPLUS

DN 119:95885

TI Biomimetic synthesis of the central tricyclic portion of ptilomycalin A

AU Snider, Barry B.; Shi, Zhongping

CS Dep. Chem., Brandeis Univ., Waltham, PA, 02254, USA

SO Tetrahedron Letters (1993), 34(13), 2099-102 CODEN: TELEAY; ISSN: 0040-4039

DT Journal

LA English

OS CASREACT 119:95885

AB The central tricyclic portion I of ptilomycalin A (II) is formed from bis enone III in two steps. Addition of O-methylisourea in DMF to III affords a mixture of IV that are both converted to a single tricyclic animal I on treatment with NH3 and NH4OAc in methanol at reflux.

IT 124512-47-6P, Ptilomycalin A

RL: PREP (Preparation)

(biomimetic synthesis of central tricyclic portion of)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

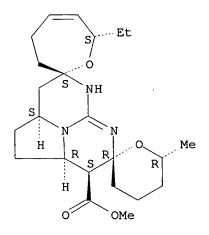
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L11 ANSWER 56 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
    1993:225662 CAPLUS
AN
DN
    118:225662
    Marine sponge Batzella polycyclic guanidine alkaloid compounds as HIV
ΤI
    virus inhibitors
    Mai, Shing Huey; Nagulapalli, Vasant Kumar; Patil, Ashok D.; Truneh,
TN
    Alemseged; Westley, John W.
    SmithKline Beecham Corp., USA
PA
    PCT Int. Appl., 46 pp.
SO
    CODEN: PIXXD2
DT
    Patent
    English
LΑ
FAN.CNT 1
    PATENT NO.
                      KIND DATE
                                        APPLICATION NO.
                                                               DATE
                       ----
    wo 9301193
                        A1 19930121 WO 1992-US5517
                                                                19920630
PΤ
        W: AU, CA, JP, KR, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE
                        A1 19930211 AU 1992-23074
                                                                19920630
     AU 9223074
PRAI US 1991-727499
                         A2
                               19910709
    WO 1992-US5517
                         Α
                               19920630
OS
    MARPAT 118:225662
     Batzella alkaloids and derivs. (I; R1 = Q; R2 = H, OH, lower alkyl, lower
ΑB
     alkenyl, lower alkoxy, aryl, NH2, guanidinyl, etc.; n = 6-10; m = 0, 5-10;
     dotted line is an optional double bond) or pharmaceutically acceptable
     salts inhibit infection with the human immunodeficiency virus (HIV). II
     was purified from Batzella extract and its structure was determined II
inhibited
     binding of HIV glycoprotein gp120 to soluble CD4 antigen in an ELISA and to
     CD4+ T-cells in a whole cell binding assay with IC50 values of 15 and 10
     \mu M, resp. In a syncytial assay, II had IC50 = 1.7 \mu g/mL. The
     cytotoxicity of II against the CD4+ cell line, SupT1, was IC50 = 20 \muM.
     II was derivatized with 2,4-pentanedione to give III, which had IC50 = 5.0
     μg/mL in the syncytial assay.
ΙT
     147664-30-0P 147664-31-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, from compound from marine sponge Batzella)
     147664-30-0 CAPLUS
RN
     Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''-
CN
     [2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
     ,8'a-dodecahydro-6''-methyl-, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA
```

Absolute stereochemistry.

INDEX NAME)

RN 147664-31-1 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, methyl ester, [2'aS[2'aα,4'α(R\*),7'α(S\*),8'β,8'aα]]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



IT 124512-47-6P

RL: PREP (Preparation)

(purification and characterization of, from marine sponge Batzella, as HIV virus inhibitor)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

L11 ANSWER 57 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:192079 CAPLUS

DN 118:192079

TI The chemistry of N-sulfinyl compounds and a synthetic approach to ptilomycalin A

AU Alexander, Michael David

CS Pennsylvania State Univ., University Park, PA, USA

SO (1991) 145 pp. Avail.: Univ. Microfilms Int., Order No. DA9214101 From: Diss. Abstr. Int. B 1992, 52(12, Pt. 1), 6388

DT Dissertation

LA English

AB Unavailable

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

L11 ANSWER 58 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1992:592135 CAPLUS

DN 117:192135

TI Structure and chemical properties of ptilomycalin A

AU Ohtani, Ikuko; Kusumi, Takenori; Kakisawa, Hiroshi; Kashman, Yoel; Hirsh, Shulamit

CS Dep. Chem., Univ. Tsukuba, Tsukuba, 305, Japan

SO Journal of the American Chemical Society (1992), 114(22), 8472-9 CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB The structure of ptilomycalin A (I, R = H) (II), a marine alkaloid possessing potent antiviral and antibiotic activities, has been determined on the basis of NMR analyses of I (R = F3CCO) (III). It has a unique structure consisting of a polycyclic guanidine and a spermidine group, each of which is linked to a 16-hydroxyhexadecanoic acid moiety. The rotational isomerism of the acylated spermidine moiety was studied by comparing the NMR properties of the synthetic trifluoroacetyl derivs. of spermidine, dipropylenetriamine, diethylenetriamine, and pentylamine. From these expts., a plausible conformation of II and III has been proposed, in which an anion is trapped between the guanidine and spermidine moieties. The III acts as a phase-transfering agent. NMR anal. of the stability of the complexes formed between III and several organic carboxylates in CDC13 solns. has been carried out.

IT 124512-47-6P

RL: PREP (Preparation)

(from Ptilocaulis spiculifer and Hemimycale, structure of)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

IT 125422-23-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of)

RN 125422-23-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[4-[(trifluoroacetyl)amino]butyl]
[3-[(trifluoroacetyl)amino]propyl]amino]hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 125422-22-2 CMF C49 H78 F6 N6 O7

Absolute stereochemistry. Rotation (-).

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 125422-25-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 125422-25-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[4-[(4-bromobenzoyl)amino]butyl][3-[(4-bromobenzoyl)amino]propyl]amino]-16-oxohexadecyl ester,
[2'aS-[2'aα,4'α(R\*),7'α(S\*),8'β,8'aα]]-,
mono(4-bromobenzoate) (9CI) (CA INDEX NAME)

CM 1

CRN 125422-24-4 CMF C59 H86 Br2 N6 O7

# PAGE 1-A

## PAGE 2-A

CM 2

CRN 586-76-5 CMF C7 H5 Br O2

- L11 ANSWER 59 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1992:470110 CAPLUS
- DN 117:70110
- TI An insight into the conformation of ptilomycalin A. The NMR properties of trifluoroacetylated spermidine analogs
- AU Ohtani, Ikuko; Kusumi, Takenori; Kakisawa, Hiroshi
- CS Dep. Chem., Univ. Tsukuba, Tsukuba, 305, Japan
- SO Tetrahedron Letters (1992), 33(18), 2525-8 CODEN: TELEAY; ISSN: 0040-4039
- DT Journal
- LA English
- AB The conformation of the bis(trifluoroacetyl) derivative of ptilomycalin A (I), a biol. active marine alkaloid, has been deduced from analyzing the NMR properties of the trifluoroacetyl derivs. of spermidine and its analogs.
- IT 124512-47-6, Ptilomycalin A
  RL: PRP (Properties)
  - (conformation of)
- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
  NAME)

L11 ANSWER 60 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:603689 CAPLUS

DN 115:203689

TI Marine alkaloid, ptilomycalin, recognizing anions. Does the ability correlate with its bioactivity?

AU Kusumi, Takenori

CS Inst. Chem., Univ. Tsukuba, Tsukuba, 305, Japan

SO Kagaku to Seibutsu (1991), 29(6), 347-8 CODEN: KASEAA; ISSN: 0453-073X

DT Journal; General Review

LA Japanese

AB A review with 2 refs. on ptilomycalin A from sponge of the Red Sea having strong antiviral and antitumor activities. Recognition of amino acid anions by ptilomycalin A trifluoroacetyl derivative is disclosed.

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
NAME)

L11 ANSWER 61 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:532188 CAPLUS

DN 115:132188

TI Crambescidins: new antiviral and cytotoxic compounds from the sponge Crambe crambe

AU Jares-Erijman, Elizabeth A.; Sakai, Ryuichi; Rinehart, Kenneth L.

CS Roger Adams Lab., Univ. Illinois, Urbana, IL, 61801, USA

SO Journal of Organic Chemistry (1991), 56(19), 5712-15 CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

AB Exts. of the red encrusting Mediterranean sponge C. crambe demonstrated cytotoxicity vs. L1210 murine lymphocytic leukemia cells as well as Herpes simplex virus, type 1. The compds. responsible for this activity, crambescidins 816, 830, 844, and 800 (I, II, III, and IV, resp.), have been isolated and shown to consist of a family of complex pentacyclic guanidines linked by a linear  $\omega$ -hydroxy fatty acid to a hydroxyspermidine. The compds. are related to the recently described ptilomycalin A, isolated from Caribbean Ptilocaulis and Red Sea Hamimycale species.

IT 135257-45-3

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of sponge, isolation and mol. structure and antiviral and cytotoxic activity of)

RN 135257-45-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 16-[[(2S)-4-amino-2hydroxybutyl](3-aminopropyl)amino]-16-oxohexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aS)- (9CI) (CA INDEX NAME)

IT 135257-46-4 135257-47-5 135283-73-7

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of sponge, isolation and mol. structure and antiviral cytotoxic activity of)

RN 135257-46-4 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[(2S)-4-amino-2-hydroxybutyl](3-

aminopropyl)amino]-16-oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 135257-47-5 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 17-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-17-oxoheptadecyl ester (9CI) (CA INDEX NAME)

RN 135283-73-7 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-8'a-hydroxy-6''-methyl-, 18-[(4-amino-2-hydroxybutyl)(3-aminopropyl)amino]-18-oxooctadecyl ester (9CI) (CA INDEX NAME)

L11 ANSWER 62 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1990:91328 CAPLUS

DN 112:91328

TI Ptilomycalin A. A novel polycyclic guanidine from sponges

AU Ohtani, I.; Kusumi, T.; Kakisawa, H.; Kashman, Y.; Hirsh, S.; McConnell, O. J.

CS Dep. Chem., Univ. Tsukuba, Tsukuba, Japan

SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1989), 31st, 356-63 CODEN: TYKYDS

DT Journal

LA Japanese

AB In screening for biol. active metabolites from marine sponges, the crude exts. (CHCl3-MeOH, 9:1) of the Caribbean sponge Ptilocaulis spiculifer and the Red Sea sponge Hemimycale species showed a remarkable activity. These exts. were separated by chromatog. to afford the same antitumor, antiviral, and antifungal active compound, ptilomycalin A (I). I has a new carbon skeleton possessing a polycyclic guanidine moiety, which is quite different from those of known guanidino compds. such as tetrodotoxins and saxitoxins. It should be also noted that spermidine is connected with the polycyclic skeleton through an ω-hydroxylated fatty acid.

IT 125422-23-3 125422-25-5

RL: BIOL (Biological study)

(of sponges, as ptilomycalin A metabolite)

RN 125422-23-3 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[4-[(trifluoroacetyl)amino]butyl]
[3-[(trifluoroacetyl)amino]propyl]amino]hexadecyl ester,
(2S,2''R,2'aS,6''R,7S,8'S,8'aR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 125422-22-2

CMF C49 H78 F6 N6 O7

Absolute stereochemistry. Rotation (-).

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 125422-25-5 CAPLUS
CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[[4-[(4-bromobenzoyl)amino]butyl][3-[(4-bromobenzoyl)amino]propyl]amino]-16-oxohexadecyl ester,
[2'aS-[2'a\alpha,4'\alpha(R\*),7'\alpha(S\*),8'\beta,8'\alpha]]-,
mono(4-bromobenzoate) (9CI) (CA INDEX NAME)

CM 1

CRN 125422-24-4 CMF C59 H86 Br2 N6 O7

PAGE 1-A

PAGE 2-A

CM 2

CRN 586-76-5 CMF C7 H5 Br O2

IT 124512-47-6

RL: BIOL (Biological study)
 (of sponges, structure and biol. activity of)

RN 124512-47-6 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

$$H_{2N}$$
 $(CH_2)_3$ 
 $H_{2N}$ 
 $(CH_2)_4$ 
 $(CH_2)_1_5$ 
 $(CH_2)_1_5$ 
 $(CH_2)_1_5$ 

IT 125473-75-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 125473-75-8 CAPLUS

CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
,8'a-dodecahydro-6''-methyl-, 16-oxo-16-[[4-[(trifluoroacetyl)amino]butyl]
[3-[(trifluoroacetyl)amino]propyl]amino]hexadecyl ester,
monomethanesulfonate, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX NAME)

CM 1

CRN 125422-22-2 CMF C49 H78 F6 N6 O7

Absolute stereochemistry. Rotation (-).

CM · 2

CRN 75-75-2 CMF C H4 O3 S

- L11 ANSWER 63 OF 63 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1990:52554 CAPLUS
- DN 112:52554
- TI Ptilomycalin A: a novel polycyclic guanidine alkaloid of marine origin
- AU Kashman, Yoel; Hirsh, Shulamit; McConnell, Oliver J.; Ohtani, Ikuko; Kusumi, Takenori; Kakisawa, Hiroshi
- CS Sch. Chem., Tel Aviv Univ., Ramat Aviv, 69978, Israel
- SO Journal of the American Chemical Society (1989), 111(24), 8925-6 CODEN: JACSAT; ISSN: 0002-7863
- DT Journal
- LA English
- AB A novel guanidine alkaloid, ptilomycalin A (I), exhibiting remarkable antifungal, antiviral, and antitumor activities, has been isolated from the Caribbean sponge Ptilocaulis spiculifer and the Red Sea sponge Hemimycale. I has a unique polycyclic guanidine moiety connected with a  $\omega$ -hydroxyhexadecanoylspermidine group through an ester linkage. The structure has been elucidated by spectroscopic analyses and chemical reactions.
- IT 124512-47-6
  - RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
    - (of sponge, isolation and mol. structure and biol. activity of)
- RN 124512-47-6 CAPLUS
- CN Dispiro[oxepin-2(3H),4'-[4H-5,6,8b]triazaacenaphthylene-7'(5'H),2''[2H]pyran]-8'-carboxylic acid, 7-ethyl-1',2',2'a,3',3'',4,4'',5'',6'',7,8'
  ,8'a-dodecahydro-6''-methyl-, 16-[(4-aminobutyl)(3-aminopropyl)amino]-16oxohexadecyl ester, (2S,2''R,2'aS,6''R,7S,8'S,8'aR)- (9CI) (CA INDEX
  NAME)

### => => d his

(FILE 'HOME' ENTERED AT 12:45:14 ON 19 SEP 2006)

	FILE	'REGIS	STF	RY'	ENT	ERED	ΑT	12:	45:2	0 ON	19	SEP	2006
L1			SC	REE	EN 96	54 AI	ND 1	1006	AND	204	0		
L2	STRUCTURE UPLOADED												
L3			QU	JE I	2 A	ND L	1						
L4		0	S	L3	SSS	SAM							
L5			SI	RUC	CTURE	E UP	LOAI	DED					
L6		0	S	L5	SSS	SAM							
L7		0	S	L5	SSS	FUL							
L8			SI	RUC	CTURE	E UP	LOAI	DED					
L9		9	S	L8	SSS	SAM							
L10		176	S	L8	SSS	FUL							

FILE 'CAPLUS' ENTERED AT 12:48:40 ON 19 SEP 2006 L11 63 S L10

FILE 'CAOLD' ENTERED AT 12:49:48 ON 19 SEP 2006

=> s 110

L12 0 L10

=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.44	649.54
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-42.75

STN INTERNATIONAL LOGOFF AT 12:50:01 ON 19 SEP 2006